

INDIAN HEALTH SERVICE
PORTLAND AREA
DIVISION OF ENVIRONMENTAL HEALTH SERVICES (DEHS)

**PROGRAM OPERATING PLAN
2016 - 2020**

EXECUTIVE SUMMARY

The Division of Environmental Health Services (DEHS) of the Portland Area Indian Health Service (IHS) provides comprehensive environmental health services to American Indian and Alaska Native (AI/AN) communities through the work of environmental health professionals. The DEHS consults with Tribes, IHS Service Units, and community members to address their environmental public health concerns and develop plans for improvement. The Portland Area DEHS uses the Ten Essential Public Health Services (EPHS) to define and clarify our role in public health and plan our activities to achieve maximum public health benefits. The EPHS provide a fundamental framework for describing public health activities.

The Portland Area DEHS is a critical part of the Tribal health system. The purpose of the DEHS is to address the wide range of environmental conditions in AI/AN communities that contribute to public health and quality of life. Healthy environments at home, work, and play are recognized as a vital factor in a person's overall health and well-being. To guide this purpose, the DEHS operates under the following mission statement:

Through shared decision making, enhance the health and quality of life of all American Indians and Alaska Natives to the highest possible level by eliminating environmentally related disease and injury through sound public health measures.

In 2013 and 2014, the DEHS program staff met and defined our Core Services, Team Values, and Strategic Initiatives through 2017. These are delivered through multiple public health focus areas, including the following: Food Safety, Children's Environment, Healthy Homes, Recreational & Tourist Facility Sanitation, Environmental and Communicable Disease Control, Institutional Environmental Health & Safety, Injury Prevention, Community Environmental Health, and Public Health Emergency Management. Through an interagency agreement with the U.S. Environmental Protection Agency, DEHS has an Integrated Pest Management Project.

TEAM VALUES

Dedication: Commitment to the team, environmental health work, IHS mission, and the people we serve.

Compassion: Respect, understanding, and care for people, communities, and the environment.

Integrity: Honesty – inner accountability; doing the right thing, without thought of personal gain, even when it's hard and no one else is looking.

Service: Working selflessly to advance public and environmental health to benefit AI/AN individuals and communities.

Trust: Value of the Federal trust responsibility to Tribes, respect for the trust Tribes place in us, and trust that co-workers, staff, and the Tribes are capable of carrying out the work.

STRATEGIC INITIATIVES

The DEHS program utilizes principles from several strategic planning models to develop our annual and long-term plans. The framework is based on evidence-based best practices, the Ten Essential Public Health Services, the National Prevention Strategy, and Healthy People 2020 topics and objectives.

PORTLAND DEHS STRATEGIC FRAMEWORK

1. Assist Tribes in Capacity Development of their Public Health Infrastructure

- 1.1 Encourage policy/code enactment and enforcement
- 1.2 Development of health licensing & inspection programs
- 1.3 Training of Tribal environmental public health inspectors and consultants
- 1.4 Support public health accreditation activities

2. Determine Environmental and Public Health Priorities through Community Engagement

- 2.1 Conduct community environmental health assessments
- 2.2 Develop community profiles & improvement plans
- 2.3 Evaluate Tribal programs to determine quality of environmental health services

3. Fully Integrate Environmental Health Services with the Clinical Treatment and Care System

- 3.1 Review capabilities of EHR and recommend utilization or development of assessment tools related to environmental health
- 3.2 Advocate for and conduct consults based on clinical referrals (screening assessments, clinical reminders)
- 3.3 Education and awareness of providers on environmental illness and conditions (e.g., pesticide poisonings)
- 3.4 Leverage patient education sessions to include environmental health topics and document in EHR
- 3.5 Train environmental public health staff on effective investigative and consultation techniques

4. Internal Workforce Development

- 4.1 Identify needed skills for comprehensive program
- 4.2 Support developmental assignments

CORE SERVICES

Core Service	Strategic Initiative	EPHS
<i>Environmental Health & Safety Survey/Public Health Inspection</i>	1	2
<i>Construction Plan Review</i>	1	5 & 6
<i>Program Evaluation</i>	1 & 2	9
<i>Surveillance & Investigation</i>	2 & 3	1 & 2
<i>Policy/Code Development</i>	1 & 2	5 & 6
<i>Community Environmental Health Profile</i>	1 & 2	1 & 4
<i>Training & Health Education</i>	1, 2, & 3	3 & 8
<i>Systems Management</i>	1, 2, 3, & 4	7, 8, 9, & 10

Environmental Health & Safety Survey/Public Health Inspection

DEHS staff conduct routine monitoring and surveillance of environmental conditions through consultative, risk-based surveys to assess the environmental hazards and identify potential pathways of human exposure. Survey reports identify problems and present recommended corrective actions. Decreased risk factors lead to reduction in injuries and illnesses.

Construction Plan Review

Construction plans are reviewed by DEHS staff to ensure they address local requirements (or best practices) and protect environmental quality and public health. Facilitation of a successful program to review facility site plans will provide the tribe with the ability to ensure that requirements and best management practices for operation and maintenance are adequately considered.

Program Evaluation

DEHS staff review facility and program health and safety plans to ensure they address local and federal requirements. Assess the quality and effectiveness of programs and activities against evidence-based criteria, with tribal input, and implement improvement plans where needed.

Surveillance & Investigation

DEHS staff control and prevent adverse health events resulting from communicable diseases and outbreaks; chronic diseases; environmental health hazards; biological, chemical, and radiological threats; and large-scale disasters. Community health problems and hazards are commonly identified through a referral system. In partnership with other IHS staff and local/state health departments, DEHS staff investigate epidemics and/or individual human disease cases. Surveillance data provide information which can be used for priority setting, policy decisions, planning, implementation, resource mobilization and allocation, and prediction and early detection of epidemics. Disease surveillance is thus a critical component of the health system since it provides essential information for optimal health care delivery and a cost-effective health strategy.

Policy/Code Development

DEHS serves as a primary resource to guide local, state, and federal public health policies and plans regarding the American Indian population. All government and organizational policies, codes, or ordinances should convey individual health promotion and protection measures. Tribes should have an effective compliance and enforcement program that is implemented consistently to achieve compliance with regulatory requirements and public health standards.

Community Environmental Health Profile

The DEHS will facilitate a comprehensive health planning process that engages the community in identifying, prioritizing, and solving environmental health problems. The Profile provides a comprehensive, professional interpretation and assessment of environmental conditions in tribal communities. The results of the report provide a “diagnosis” with an understanding of the community's health status and ensure that the community's priorities consider specific health status issues. This report can be used by tribal leaders and program staff to make informed decisions for corrective actions where needed.

Training & Health Education

Health literacy, including an understanding of the concepts and terms related to environmental disease and injury prevention, helps people take actions and adopt healthy behaviors that reduce the impact of disease and injuries. DEHS staff provide training and ensure culturally-appropriate and consistent environmental health education is provided to individuals and the community. Operator training ensures federal and tribal facilities maintain compliance with requirements and regulations.

Systems Management

DEHS is a professional program with high morale and motivated people. Staff have increased abilities to respond to changes and new developments, can apply innovative strategies, and provide quality products. Enhanced credibility with stakeholders and improved customer accessibility to health services and information create a better educated and aware customer base. Program priorities and services are based on continuous improvement and customer needs. Tribes receive equitable levels of service. Service is uniform and high-quality. Program has an established quality assurance and improvement process and the ability to measure the program against national criteria. The process identifies program elements that may require improvement or be deserving of recognition. Program functions, services, and activities are aligned; program performance is aligned with personnel performance. Improved utilization of manpower and processes maximizes management of available funding and other resources. Support research to define effective approaches to environmental health activities and develop an evidence-based DEHS program.

DEHS: ANNUAL WORKPLAN, 2016

SERVICE	OBJECTIVE(S)	OUTPUT(S)
Survey/Inspection of Built Environment	All Tier I (High Risk) Community Facility Operations Receive a Survey/Inspection	Report % using WebEHRS data from e-surveys
Construction Plan Review	All Requests Processed \leq 30 Days	Report # and average time to complete
Program Evaluation	Conduct Reviews of Tribal and IHS Environmental Health Programs	Report of Findings and Certification Statements for Each
Surveillance & Investigation	All Investigations Initiated \leq 7 days *Monitor Communicable Disease & Injury to Detect and Prevent Outbreaks and Emerging Threats	Report # and average time using WebEHRS RCP *Monthly and Annual Trend Report Published
Policy/Code Development	Assessment of Tribal Health and Safety Codes	Report # of Standard Policies/Codes Provided
Training & Health Education	Assure Required Public Health Operator Training	Certify and Report: <ul style="list-style-type: none"> • % Food Handler Training • % Health and Safety Training for Head Start/Child Care Staff • % OSHA Training for Service Units
Community Environmental Health Profile	Conduct Assessments and Develop Improvement Plans	Publish Reports for Tribes
Systems Management	Program Planning & Direction: <ul style="list-style-type: none"> • Workforce Development • Internal Policies & Procedures Public Health Projects & Studies: <ul style="list-style-type: none"> • YAMP QI • PESTICIDES EPA IA & SIPM 	Publish: <ul style="list-style-type: none"> • Training Plan for Staff • Guidelines & SOPs Publish Annual Progress or Final Reports

PUBLIC HEALTH EMERGENCY MANAGEMENT: ANNUAL WORKPLAN, 2016

SERVICE/CAPABILITY	OBJECTIVE	OUTPUT
Program Management & Planning	All Operations Have COOP & Emergency Management Plans	Certify & Report
Preparedness	Mission Essential Functions & Communications are Routinely Tested	Evaluation Report
Program Evaluation	Conduct Reviews of Service Unit Emergency Management Programs	Report of Findings
Surveillance & Investigation	Monitor Communicable Disease & Injury to Detect and Prevent Outbreaks and Emerging Threats	Monthly and Annual Trend Report Published
Training	Provide Occupant Emergency Awareness Training for Staff	Report % Completing Online Training (Machine Works)

PERFORMANCE MEASURES

Environmental health is the second largest public health professional sub discipline; therefore it has significant potential for impact (University of Michigan, 2013). Several factors have recently created challenges to service delivery: greater number of and more complicated demands and laws; more constrained resources (human and fiscal); and increased calls to prove efficiency, efficacy, and impact. The DEHS program evaluates the effectiveness and success of our services and products through delivery of new and established evidence-based best practices.

The program practices which have the greatest outcome are considered on a continuous basis through total quality improvement efforts. The outcome and impact are qualified and quantified by environmental public health indicators. Environmental public health indicators are descriptive measures that summarize environmental monitoring or public health surveillance data. The determinants or indicators which the DEHS measures include data about health effects, environmental exposures, environmental health hazards or risk factors, and systems such as programs, projects or policies that when implemented, minimize or prevent an environmental hazard, exposure, or health effect from occurring.

Public health impacts are achieved through accomplishing the following goals. Achieving sustainable public health impacts takes enormous effort over time. Services and activities associated with these goals will be incrementally implemented and measured over 5 years, from 2016 – 2020.

FOCUS AREA/ISSUE	PRACTICE/SERVICE	INDICATOR(S)	MEASURE
INJURY PREVENTION	SURVEILLANCE & INVESTIGATION FOR MOTOR VEHICLE CRASH	HAZARD & HEALTH EFFECT	INCREASED SEAT BELT USAGE & DECREASED MOTOR VEHICLE CRASH FATALITIES
FOOD SAFETY	INVESTIGATE THROUGH SURVEYS/INSPECTIONS	HAZARD	REDUCTION OF RISK FACTORS FOR FOODBORNE ILLNESS IN INSTITUTIONAL FOOD SERVICE
CHILDREN'S ENVIRONMENTS	ENVIRONMENTAL RISK ASSESSMENTS/SURVEYS	EXPOSURE	REDUCTION IN CHILDREN EXPOSED TO HAZARDOUS CHEMICALS
COMMUNITY ENVIRONMENTAL HEALTH	ENVIRONMENTAL HEALTH ASSESSMENT & IMPROVEMENT PLANS	SYSTEM & HAZARD	COMPLETE COMMUNITY ENVIRONMENTAL HEALTH PROFILES – REDUCED COMMUNITY ENVIRONMENTAL HAZARDS

FOCUS AREA/ISSUE	PRACTICE/SERVICE	INDICATOR(S)	MEASURE
HEALTHY HOMES	SURVEILLANCE & INVESTIGATION FOR CHRONIC DISEASE MANAGEMENT	HEALTH EFFECT & HAZARD	REDUCTION IN EMERGENCY DEPARTMENT VISITS FOR ASTHMA & IMPROVED HOUSING ENVIRONMENTS
RECREATIONAL & TOURIST FACILITY SANITATION	POLICY/CODE DEVELOPMENT EVALUATE SYSTEMS MANAGEMENT	SYSTEM - POLICY & PROGRAM DEVELOPMENT	IMPLEMENT TRIBAL HEALTH INSPECTION PROGRAMS – PUBLIC HEALTH POLICY
INSTITUTIONAL ENVIRONMENTAL HEALTH & SAFETY	EVALUATE SERVICES	SYSTEM - PROGRAM DEVELOPMENT	COMPLETE SERVICE UNIT SAFETY PROGRAM EVALUATIONS

ATTACHMENTS

- 2016 – 2020 DEHS Performance Measures

REFERENCES

- PO-16-CEH, Children’s Environmental Health, EPA Scope of Work and IA for Research Project
- PO-16-CHP, Community Environmental Health Profile Project
- PO-13-YAMP, Yakama Asthma Management Project

***Injury Intervention Performance and National Budget Measure
(FY 2016 – FY 2020)
Executive Summary***

Goal: Increase seat belt use rate* among AI/AN in Yakama.

Criteria:

- Seat belt use will be measured to establish a baseline and monitored over time to determine if targeted interventions increase seat belt use.
- The Area DEHS program will choose a tribal community with seat belt use interventions already underway.
- Aggregate data will be submitted using WebEHRS. An activity associated with the project will be used to collect and store the data in WebEHRS.

Year 1 Target (FY2016)

Establish a baseline for seat belt use from survey data collected in the field and submitted in WebEHRS.

Map serious and fatal motor vehicle crashes on the Reservation. Conduct a legal review of the Tribal traffic safety and seat belt laws.

Year 2 Target (FY2017)

Develop and implement targeted interventions to increase seat belt use. Begin an educational campaign to increase seat belt use and traffic safety.

Conduct road hazard assessments where the most MVCs have occurred. Develop a report of road conditions requiring maintenance or construction projects to improve traffic conditions.

Year 3 Target (FY2018)

Measure interim seat belt use to determine effectiveness of interventions. Propose adjustments to interventions based on interim seat belt use findings.

Year 4 Target (FY2019)

Conduct final assessment of seat belt use and compare to baseline.

Year 5 Target (FY2020)

Disseminate best practices determined to be most effective and highlight challenges for improving seat belt use.

* Based on national DEHS program budget performance measure for injury intervention.

***Environmental Health Performance and National Budget Measure
(FY2016-FY2020)
Executive Summary***

Goal: Decrease the number of foodborne illness risk factors identified at Head Starts and Child Care centers in tribal communities[†].

Criteria:

- Establish a baseline utilizing multiple year, retrospective data collection and analysis.
- Preparation of WebEHRS will need to be completed to optimize data collection and analysis.
 - Data collection and analysis will target surveys conducted in Food Service Operations (Type 80) associated with Head Starts and institutional Day Care Centers/Nurseries.
- Foodborne illness risk factors will be identified using CDC criteria and each factor will be cross-walked with the appropriate FDA food code violation code(s). These risk factors will be similar to those used in the 2011-2015 budget performance measure.

Year 1 Target (FY2016)

Establish a baseline of foodborne illness risk factors using data from food service inspections in Child Care centers recorded in WebEHRS.

Year 2 Target (FY2017)

Develop and implement multiple interventions to decrease foodborne illness risk factors.

Year 3 Target (FY2018)

Conduct interim assessment of foodborne illness risk factors to determine effectiveness of interventions. Adjust interventions based on interim findings.

Year 4 Target (FY2019)

Conduct final assessment of foodborne illness risk factors and compare to baseline.

Year 5 Target (FY2020)

Disseminate model practices and highlight challenges in reducing the foodborne illness risk factors.

[†] Based on national DEHS program budget performance measure for environmental surveillance.

***Environmental Health Performance Measure
(FY2016-FY2020)
Executive Summary***

Goal: Decrease the number of children exposed to environmental contaminants identified at Head Starts and Child Care Centers in tribal communities.

Criteria:

- Establish the scope of work and secure funds through an interagency agreement with EPA.
- Project prerequisites include development of a QAPP and survey questionnaire.
 - Centers will be notified and must approve of involvement in the project.
- DEHS staff will undergo formal environmental sampling protocol training from EPA.
- Final report will include comparison to original study for purposes of future research needs.

Year 1 Target (FY2016)

Establish a baseline of children exposed to environmental contaminants and health risk factors using data from surveys and inspections in Child Care Centers.

Year 2 Target (FY2017)

Develop and implement multiple interventions to decrease environmental health illness risk factors.

Year 3 Target (FY2018)

Conduct interim assessment of children exposed to environmental health risk factors to determine effectiveness of interventions. Adjust interventions based on interim findings.

Year 4 Target (FY2019)

Conduct final assessment of children exposed to environmental health risk factors and compare to baseline.

Year 5 Target (FY2020)

Disseminate model practices and highlight challenges in reducing the environmental health risk factors.

***Environmental Health Performance Measure
(FY2016-FY2020)
Executive Summary***

Goal: Reduce community environmental hazards in tribal communities.

Criteria:

- Hire a temporary employee, entry-level Environmental Health Specialist in Portland to focus on carrying out the project.
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Year 1 Target (FY2016)

Conduct community environmental health assessments (CEHA) in 7 Tribes.

Year 2 Target (FY2017)

Develop community environmental health improvement plans (CEHIP) for the 7 Tribes. Publish CEHA and CEHIP findings in one Community Environmental Health Profile (CEHP) report for each Tribe.

Finalize protocols and standard operating procedures for CEHPs.

Year 3 Target (FY2018)

Begin CEHP process for at least 7 additional Tribes.

Document highlights and lessons learned from the process.

Year 4 Target (FY2019)

Continue CEHPs.

Year 5 Target (FY2020)

CEHPs published for all direct service Tribes. Disseminate model practices and highlight challenges. Prepare for a new cycle of CEHPs.

***Environmental Health Performance Measure
(FY2016-FY2020)
Executive Summary***

Goal: Decrease the number of Emergency Department visits and Hospitalizations for asthma patients in Yakama.

Criteria:

- Establish a baseline utilizing multiple year, retrospective data collection and analysis.
- Conduct chart reviews of patients who have been enrolled in the Asthma Management Program.
- Document improved health outcomes, any cost savings, and successful environmental interventions.

Year 1 Target (FY2016)

Establish a baseline of Yakama asthma patients with emergency department (ED) utilization and/or hospitalizations.

Year 2 Target (FY2017)

Develop and implement multiple interventions to decrease ED visits and hospitalizations. Publish report of environmental health impacts to reduce asthma ED visits and hospitalizations.

Year 3 Target (FY2018)

Conduct interim assessment of foodborne illness risk factors to determine effectiveness of interventions. Adjust interventions based on interim findings.

Year 4 Target (FY2019)

Conduct final assessment of patient visits and hospitalizations and compare to baseline.

Year 5 Target (FY2020)

Disseminate model practices and highlight challenges in reducing the asthma ED visits and hospitalizations.

***Environmental Health Performance Measure
(FY2016-FY2020)
Executive Summary***

Goal: Increase the number of environmental health inspection programs in Tribal Enterprises and Gaming Centers.

Criteria:

- Establish the protocols and standards for consultation visits with Tribal Gaming programs to review their environmental public health and safety requirements according to National Indian Gaming Commission rules (25 CFR 559) and State Gaming Compacts.
 - Prioritize by Enterprise/Gaming Commission and establish a schedule for implementation.
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Year 1 Target (FY2016)

Establish agreements with 8 Tribal Enterprises/Gaming Commissions for health and safety program implementation.

Conduct multiple site visits and training of staff at these facilities and operations.

Year 2 Target (FY2017)

Continue mentoring and training of enterprise and gaming staff.

Year 3 Target (FY2018)

Identify additional Tribal Enterprises/Gaming Commissions for implementing health and safety programs.

Conduct audits and program reviews of the first 8 programs.

Year 4 Target (FY2019)

Continue identification and implementation of health and safety programs.

Conduct audits and triennial program reviews (as needed) of additional programs.

Year 5 Target (FY2020)

Conduct audits and triennial program reviews (as needed) of additional programs.

Establish triennial program review schedule for all programs.

Disseminate model practices and highlight challenges in establishing the environmental public health and safety programs at Tribal Enterprises and Gaming Centers.

***Institutional Environmental Health Performance Measure
(FY2016-FY2020)
Executive Summary***

Goal: Increase the number of IHS facility safety risk assessment programs at Health Clinics.

Criteria:

- In order to maintain compliance with Federal regulations and to maintain health care accreditation status, IHS Service Units should establish and maintain risk assessment programs.
- One Service Unit will be targeted for pilot implementation before roll out to all other Service Units.
- Service Unit Facility Managers and Safety Officers will be responsible for managing the local safety risk assessment programs.

Year 1 Target (FY2016)

Develop the IHS Health Clinic Facility Safety Risk Assessment Program protocols, forms, and standards.

Identify pilot site and conduct multiple site visits and training of staff at the pilot Service Unit.

Year 2 Target (FY2017)

Continue mentoring and training of Service Unit staff.

Year 3 Target (FY2018)

Identify additional Service Units for implementation of facility safety risk assessment programs.
Conduct audit and program review of the first program.

Year 4 Target (FY2019)

Continue identification and implementation of facility safety risk assessment programs.
Conduct audits and triennial program reviews (as needed) of additional programs.

Year 5 Target (FY2020)

Conduct audits and triennial program reviews (as needed) of additional programs.
Establish triennial program review schedule for all programs.
Disseminate model practices and highlight challenges in establishing the IHS Health Clinic Facility Safety Risk Assessment Programs.