ANNUAL REPORT 2023

The Division of Environmental Health Services

INDIAN HEALTH SERVICE
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

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

The Division of Environmental Health Services

INDIAN HEALTH SERVICE • U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

ANNUAL REPORT 2023

This Annual Report for Calendar Year 2023 was produced by the Indian Health Service Division of Environmental Health Services to provide relevant information about the Program. Additional information can be obtained by contacting:

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On the cover: The 2023 photo contest winner... Rebekah Abangan measuring the water chemistry of a swimming pool at a youth treatment center was taken by Vince Garcia, both of the Phoenix Area IHS (Phoenix Area; Summer 2023)

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Profile of the DEHS Program

Program Vision

The vision of the DEHS is "Every American Indian and Alaska Native will live in a safe, healthy environment. Community-based environmental health programs, developed in partnership with tribes, will utilize sound public health practices and resources to achieve the lowest disease and injury rates in the nation."

Our Operational Model is available in the OEHE Technical Handbook, Volume VIII, Part 112-1 and aligns with Part 3 Chapter 11 of the Indian Health Manual. It identifies core services all Areas should provide the tribes.

We are Environmental Health Officers, Environmental Health Specialists, Health Care Safety Officers, Institutional Environmental Health Officers, and Injury Prevention Specialists. We provide direct environmental health services and consultation to American Indian and Alaska Native communities and Indian Health Service programs.

Program Mission

The mission of the Division of Environmental Health Services (DEHS) is "through shared decision making and sound public health measures, [to] enhance the health and quality of life of all American Indians and Alaska Natives to the highest level by eliminating environmentally related disease and injury." In support of this mission, the DEHS provides a range of services to the AI/AN communities.

Our Operating Philosophy

The operating philosophy of the DEHS is based on the Ten Essential Public Health Services first articulated in 1994 by a partnership of local, state, and national public health leaders. The Ten Essential Public Health Services were revised in 2020 to align the framework with the future of public health practice. DEHS adapted them and incorporated this set of strategies into the methods in which it delivers services to AI/AN communities across the country. Specific environmental health-related resources are available from the Centers for Disease Control and Prevention (CDC).

ASSESSMENT

1. Assess and monitor population health status, factors that influence health, and community needs and assets.
2. Investigate, diagnose, and address health problems and hazards affecting the population.

POLICY DEVELOPMENT

3. Communicate effectively to inform and educate people about health, factors that influence it, and how to improve it.
4. Strengthen, support, and mobilize communities and partnerships to improve health.
5. Create, champion, and implement policies, plans, and laws that impact health.
6. Utilize legal and regulatory actions designed to improve and protect the public's health.

ASSURANCE

7. Assure an effective system that enables equitable access to the individual services and care needed to be healthy.
8. Build and support a diverse and skilled public health workforce.
9. Improve and innovate public health functions through ongoing evaluation, research, and continuous quality improvement.
10. Build and maintain a strong organizational infrastructure for public health.

Using the Ten Essential Environmental Health Services as a framework, the IHS DEHS developed five national focus areas: children's environment, safe drinking water, food safety, vectorborne and communicable diseases, and healthy homes. Details on projects conducted throughout the tribal communities served by the DEHS Program in 2023 can be found in the National Focus Areas section of this report.

Program Structure

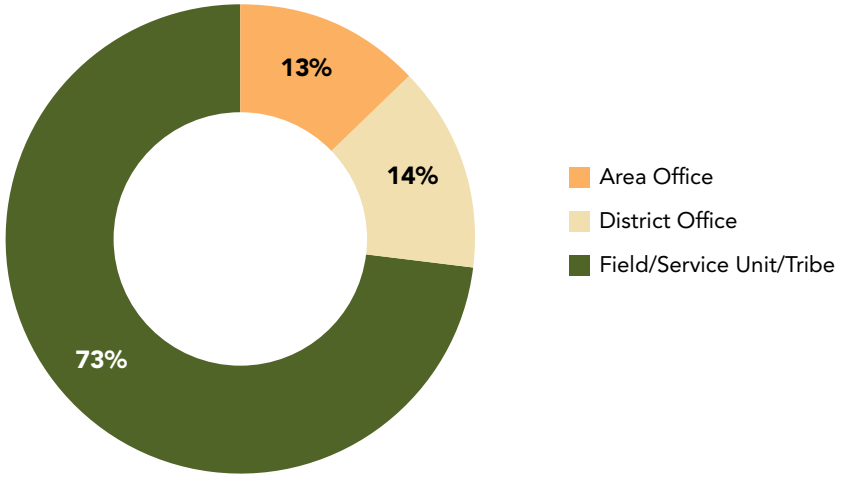
The DEHS is a comprehensive, field-based program.

The DEHS is a field-based environmental health services program that takes pride in supporting the needs of individual tribal communities. The DEHS operates under a decentralized organizational structure, with most of its staff employed in district and field offices throughout the 12 IHS Areas (Figure 1). In 2023, the national DEHS program consisted of a total of 268 staff, excluding the headquarters staff listed below. The DEHS at Area Offices were typically staffed with a Division Director and one or two professional staff (e.g., IP Program Manager and/or IEH Program Manager). District Environmental Health Specialists (EHS) and their support staff are often located away from the Area Offices and closer to the tribal communities. DEHS HQ, located in in Rockville, Maryland, is staffed similarly to the Areas.

List of headquarters staff from the Division of Environmental Health Services

 **CAPT Mike Reed** Director	 **CDR Andrea Tsatoke** Injury Prevention Specialist
 **CDR Timothy "Matt" Albright** Deputy Director	 **CAPT Stephen R. Piontkowski** Senior EH Officer
 **Brian Hroch** Institutional Environmental Health (IEH) Program Manager	 **LCDR Samuel Frank** Senior EH Officer
 **CDR Molly Madson** Injury Prevention (IP) Program Manager	

Figure 1: Environmental Health Staff by Duty Station.



Program Services

The DEHS staff provide direct environmental health services and technical assistance to tribes on a broad scope of program areas like water quality, waste disposal, food safety, community injury prevention, vector control, and occupational safety and health. More details are in the DEHS Services section of this report.

SERVICES

- Investigations
- Surveys/Inspections
- Training
- Plan Review
- Policy Development
- Technical Assistance
- Vector Control
- Disease Surveillance
- Project Development

TOPICS

- Water Quality
- Air Quality
- Injury Prevention
- Infection Control
- Sanitation
- Fire Safety
- Occupational Safety & Health
- Waste Management
- Food Safety
- Epidemiology
- Vectorborne/Zoonotic Diseases
- Aquatic Facilities
- Emergency Preparedness

PERFORMANCE MEASURES

"Performance measures represent key outcomes that the program can reasonably expect to influence and should be selected with a focus on mission and key activities a program performs."

The FY 2021-2025 Environmental Surveillance Performance Measure, the percent of establishments with a Certified Food Protection Manager, is tracked in the DEHS Web-based Environmental Health Reporting System (WebEHRS) for food service establishments.

FY 2023	FY 2022	FY 2021
80.6%	81.5%	87.5%

The FY 2021-2025 Injury Prevention Performance Measure, the number of persons who received injury prevention training, is tracked in WebEHRS.

FY 2023	FY 2022	FY 2021
599	484	473

Performance measures are required by Federal agencies and designed to improve program management throughout the Federal government. In general, they represent a fiscal year (FY) performance period, should align with the Department of Health and Human Service's Strategic Plan, and should fit at least one of three basic criteria:

1. demonstrate the impact of the budget request
2. demonstrate a key benefit to the public
3. inform/support program-level management decisions

Environmental Surveillance

The Division of Environmental Health Services and Area Environmental Health Directors selected Food and Drug Administration (FDA) 2-102.12 Certified Food Protection Manager (CFPM) as the performance measure at the annual DEHS Directors meeting in 2019 based on a Centers for Disease Control and Prevention Environmental Health Specialist-Network (EHS-Net) study. That study recognizes the presence of a CFPM reduces the risk of foodborne illness outbreaks for an establishment and was a distinguishing factor between restaurants/food services that experienced a foodborne illness outbreak and those that had not. The measure aligns with the DEHS Operational Model and Ten Essential Environmental Health Services.

Injury Prevention

This measure was selected at the annual DEHS Directors meeting in 2019. It focuses on the importance of injury prevention training to help build the capacity of staff and tribes to prevent injuries and deaths due to injuries in tribal communities. It raises awareness and empowers individuals and communities. Training is also one of the components of 3Es (Education, Environmental modifications and Enforcement) that are essential in a comprehensive approach to reduce health impacts from injuries.

Program Resources

The current budget of the DEHS Program is approximately $31 million. This funding is derived from three primary sources: congressional allocation; the IHS Director's Initiatives; and IP budget enhancements (Table 1). DEHS funds support a wide variety of activities, including IP, IEH, safety management, industrial hygiene, food safety, vectorborne disease control, and technical assistance to community water and waste disposal facility operators.

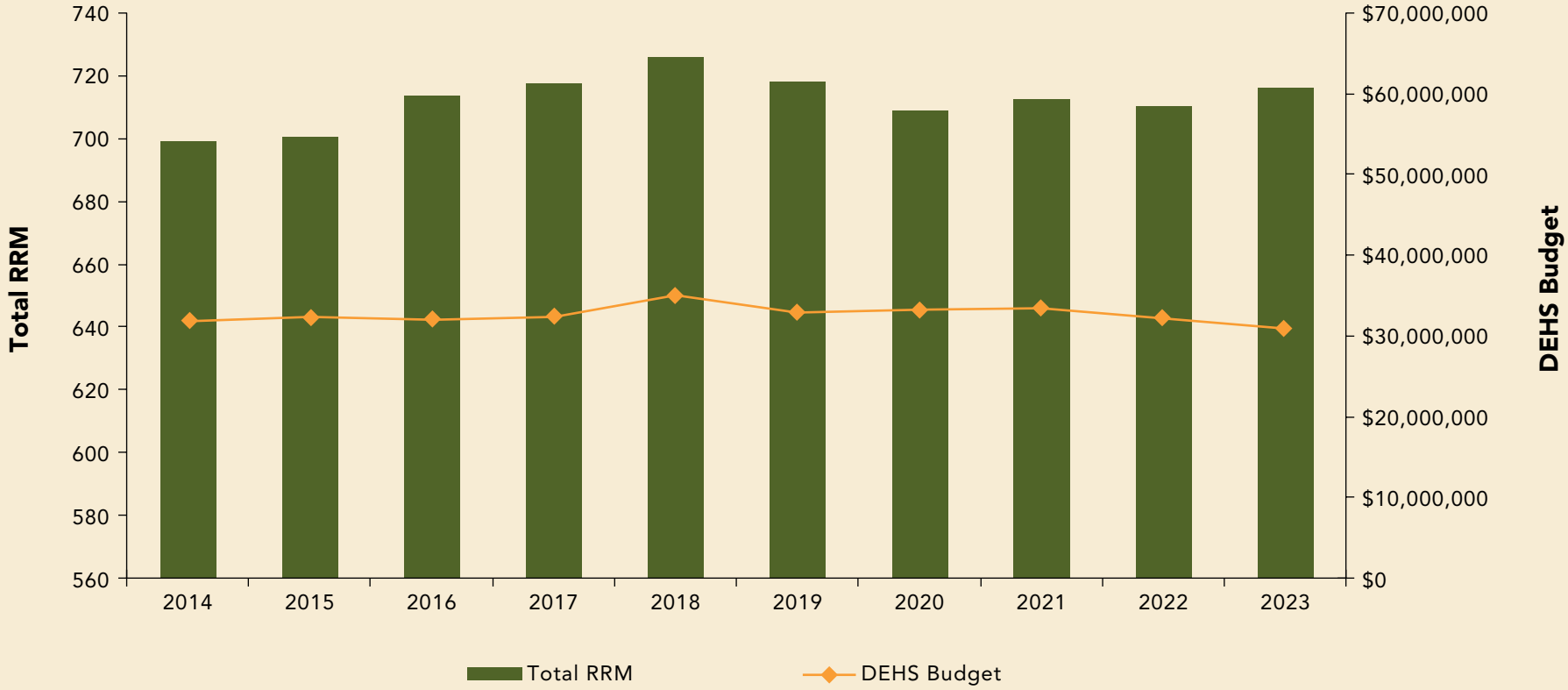
The DEHS budget is derived from the overall Environmental Health Support Account (EHSA) that supports the activities of both the DEHS as well as the Division of Sanitation Facilities Construction (DSFC). For 2023, the DEHS share of the EHSA budget was approximately 30%, or $28,339,761. Figure 2 depicts a historical comparison of the workload-based Resource Requirement Methodology (RRM) versus the distribution of Program funds from 2014 to 2023. Table 2 displays the current level of need funded (LNF) for each of the 12 Areas; the data represent both IHS staff and tribal staff.

Table 1: DEHS Program Funding Sources.

				OEHE Funds Provided to DEHS					
Fiscal Year	Total EHSA Budget	DEHS RRM Share	DEHS Budget*	COSTEP**	Injury Prevention**	Residency**	IHS Director's Initiative***	Injury Prevention Budget Enhancements	Total DEHS Budget****
2014	$70,901,479	41.00%	$29,069,606	$136,000	$63,000	$100,000	***	$2,766,698	$32,072,304
2015	$72,550,497	41.00%	$29,745,696	$176,000	$0	$125,000	***	$2,766,698	$32,512,394
2016	$69,531,437	42.00%	$29,203,204	$184,000	$0	$125,000	***	$2,766,698	$32,278,902
2017	$70,793,387	40.00%	$28,642,933	$160,000	$0	$125,000	***	$2,766,698	$32,662,025
2018	$77,088,387	41.00%	$31,387,041	$96,000	$0	$125,000	***	$2,766,698	$35,342,133
2019	$78,496,387	38.00%	$30,056,230	$96,000	$0	$125,000	***	$2,766,698	$33,043,928
2020	$80,707,396	38.00%	$30,660,740	$16,000	$0	$125,000	***	$2,766,698	$33,568,438
2021	$80,723,396	35.06%	$30,666,818	$56,000	$0	$125,000	***	$2,766,698	$33,614,516
2022	$86,952,526	33.79%	$29,381,258	$48,000	$0	$125,000	***	$2,766,698	$32,320,956
2023	$93,530,565	30.30%	$28,339,761	$40,000	$30,032	$0	***	$2,766,698	$31,176,491

*Represents an approximation based on initial DEHS and DSFC RRM calculations
**Office of Environmental Health and Engineering funds provided to DEHS
***IHS Director's Initiative, $304,000 was added to Injury Prevention Budget Enhancements starting in 2001
****Dollar amounts in this table may appear different when compared to tables published prior to 2023 due to a calculation correction

Figure 2: DEHS Budget and Total RRM from 2014 to 2023.



*Dollar amounts in this chart may appear different when compared to charts published prior to 2023 due to a calculation correction

As Table 2 shows, the DEHS Program strives to accomplish its tasks at a funding level of 39.5% of the estimated actual need. In order to maximize the utilization of available resources, the DEHS has established partnerships with federal agencies. Partnerships change as needs are addressed or emerge. A few of the partners over the years include:

- Centers for Disease Control and Prevention (CDC)
- Uniformed Services University of the Health Sciences
- National Institutes of Health (NIH)
- Johns Hopkins University
- University of North Carolina
- University of Colorado Denver
- Safe States Alliance

Table 2: Level of Need Funded (LNF) 2023

Area	Total Staff*	RRM	%LNF	Federal Staff	Tribal Staff
Alaska	37	98.723	37.5%	0	37
Albuquerque	17	34.229	49.7%	17	0
Bemidji	24	52.576	45.6%	12	12
Billings	16	29.053	55.1%	5	11
California	12	54.033	22.2%	7	5
Great Plains	18	52.323	34.4%	18	0
Nashville	14	44.314	31.6%	3	11
Navajo	48	107.955	44.5%	39	9
Oklahoma City Area	36	107.89	33.4%	9	27
Phoenix	44	69.672	63.2%	29	15
Portland	14	53.306	26.3%	2	12
Tucson	3	13.134	22.8%	2	1
Total**	283	717.208	39.5%	143	140

*Includes tribal staff hired with IHS Cooperative Agreement Funds; total staffing number (283) in Table 2 result of error in reporting and did not have significant impact on final RRM values; HQ staff are not reflected here.
**Total is not exact due to rounding.
Data from 2022 determines the 2023 LNF.

Education

Education is a cornerstone of any successful public health program because it is the first step in raising awareness and empowering individuals and communities to participate in resolving community health issues. DEHS staff conducted training sessions during 2023 on a variety of topics. The Environmental Health Support Center (EHSC) in Albuquerque, New Mexico, provided program management, IP, topic-specific EH, and IEH courses or webinars. In 2023 there were thirteen in-person classes with 367 students, fifteen webinars with 763 students, and four virtual classes with 130 students, for a total of 1260 participants (Table 3).

In addition to these trainings, monthly "office hours" began this year for the general environmental health track and for safety officers. Office hour sessions provide opportunity for open discussion on a topic of choice, fostering connection, dialog, and collaboration across the Areas.

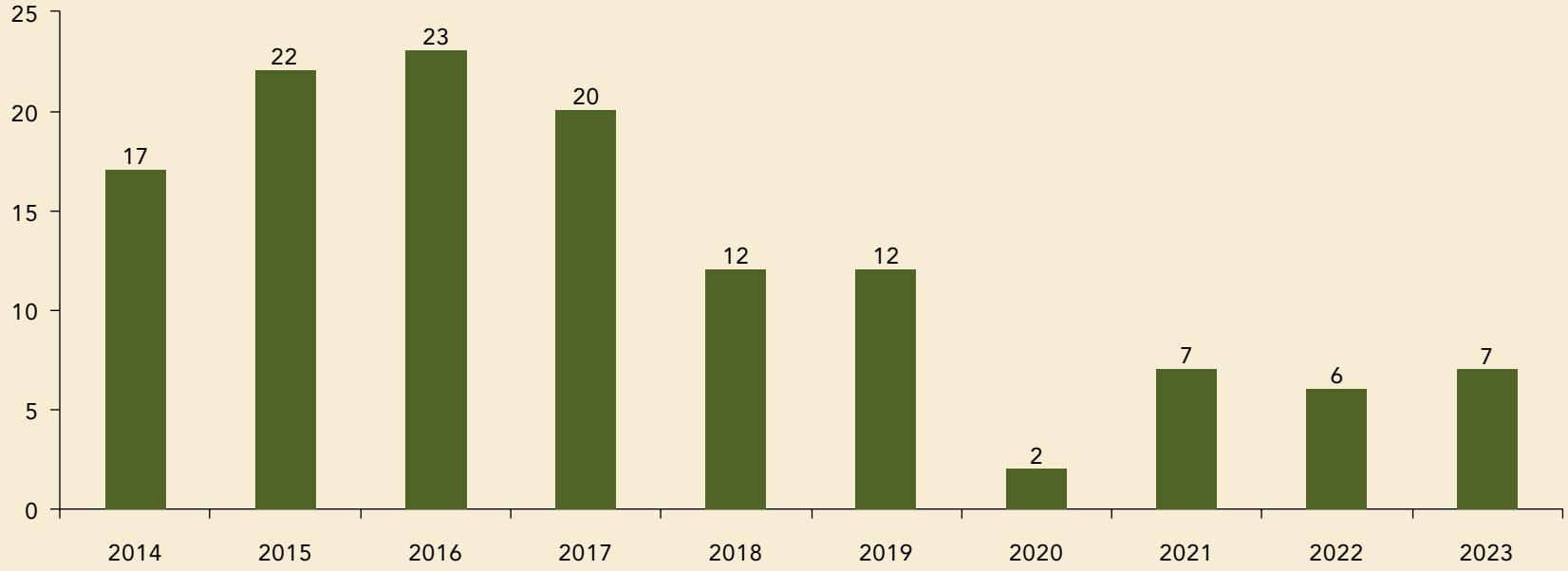
Successful delivery of environmental health services to tribal communities rests on the foundation of a competent and motivated workforce. Figure 3 shows the numbers of student externs hired since 2014. The number of externs hired annually fluctuated from 23 to 02. DEHS supported seven student externs in 2023.

Table 3: EHSC Sponsored Courses – 2023.

In-Person Courses	Number of Participants	Date	Location
WebEHRS 101	20	26-Jan	Albuquerque, NM
NFPA 101 Life Safety Code	47	2-Mar	Phoenix, AZ
OEHE Orientation - EH Track	25	7-Apr	Albuquerque, NM
NFPA 101 Life Safety Code	46	26-Apr	Albuquerque, NM
Playground Risk Management Training	31	4-May	Albuquerque, NM
Effective Training Methods for Adult Learners	6	16-Jun	Albuquerque, NM
LPD Leading Self Cohort	17	10-Aug	Albuquerque, NM
Injury Prevention Course 2	20	17-Aug	Albuquerque, NM
CHEST	33	24-Aug	Tulsa, OK
Fundamentals of NFPA for EHOs	23	31-Aug	Albuquerque, NM
CHEST	30	14-Sep	Tulsa, OK
Albuquerque Area OEHE Workshop	47	27-Oct	Durango, CO
Fundamentals of Hospital Safety Management	22	8-Dec	Shiprock, NM
TOTAL IN-PERSON STUDENTS	**367**		

Webinars/Virtual Courses	Number of Participants	Date	Location
LPD (Leadership and Personal Development) Webinar Series - Managers Toolkit - Effective Feedback and Coaching	7	9-Jan	Online
WebEHRS Virtual Learning Session	18	19-Jan	Online
LPD Webinar Series - Managers Toolkit - Developing Others	28	13-Feb	Online
LPD Webinar Series - Delegating Effectively	19	24-Apr	Online
LPD Webinar Series - Building & Leading Successful Teams	15	15-May	Online
LPD Webinar Series: Managing Self Through Change and Turmoil	13	12-Jun	Online
LPD Webinar Series - Managing Conflict Constructively	9	24-Jul	Online
LPD Webinar Series - Emotional Intelligence	26	14-Aug	Online
LPD Webinar Series - The Art of Strategic Thinking	9	18-Sep	Online
LPD Webinar Series - Critical Conversatiosn	17	23-Oct	Online
LPD Webinar Series - Leading Transformation and Change	15	20-Nov	Online
2022 FDA Food Code Updates	55	5-Dec	Online
LPD Webinar Series - Managers Toolkit - Effective Performance Discussions	42	11-Dec	Online
EH Office Hours (1 Session)	26	Monthly	Online
Safety Officers Office Hours (12 Sessions)	464	Monthly	Online
NFPA 101 Life Safety Code	32	20-Jan	Virtual
Fundamentals of NFPA for EHOs	33	17-Feb	Virtual
Introduction to Injury Prevention	55	14-Jul	Virtual
LPD Leading Self Cohort	10	9-Nov	Virtual
TOTAL WEBINAR/VIRTUAL STUDENTS	**893**		
TOTAL PARTICIPANTS	**1260**		

Figure 3: Number of college students participating in the DEHS extern program, 2014 to 2023.



The DEHS views the opportunity to offer financial support for long-term training as a major retention tool and has supported staff in master's programs for many years. Areas reported forty-one DEHS staff funded by IHS for college courses in 2023. Of the forty-one, thirty-seven were federal employees and four were tribal employees.

There are 13 IEH Residency Graduates currently active with IHS and tribal programs (Table 4).

Table 4: Active IEH Residency Graduates.

Graduate	Residency Year
Brandon Parker	2021
Dustin Joplin	2019
John Hansen	2017
Timothy Taylor	2014
Valerie Herrera	2010
Ricardo Murga	2010
Danny Walters	2009
Charles Woodlee	2008
David Cramer	2005
Mark Strauss	2005
Brian Hroch	2003
Chris Kates	2001
Keith Cook	1999

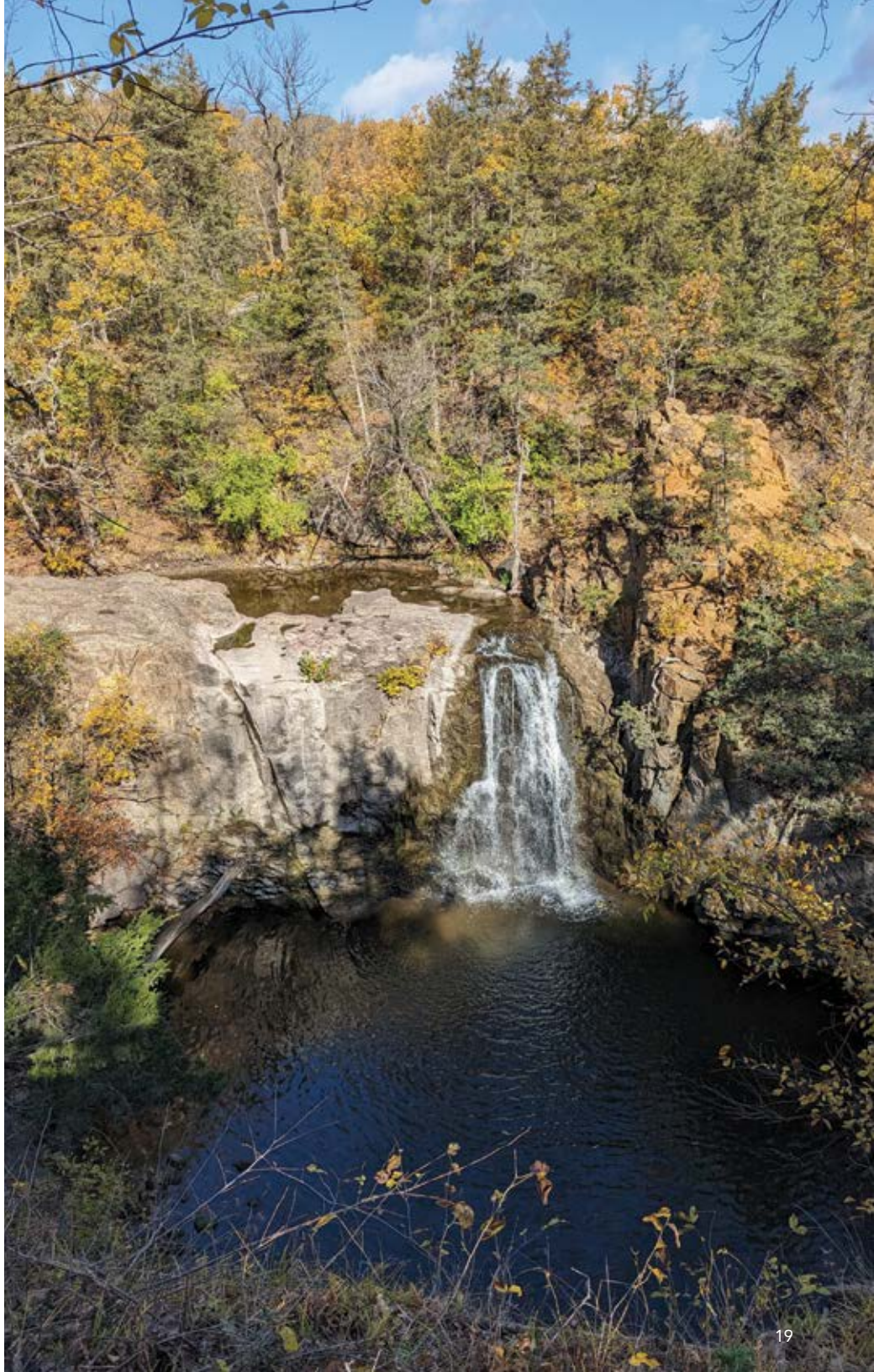
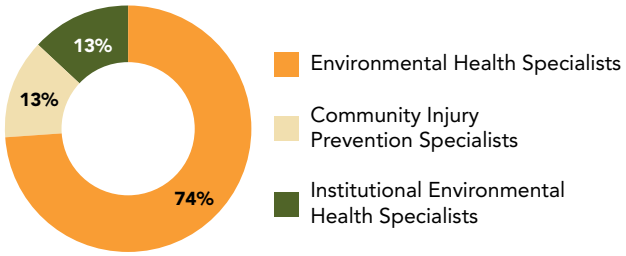


Figure 4: Distribution of environmental health staff within the national program.



Distribution of federal (131) and tribal (137) staff (N=268) within the national program (this excludes headquarters staff) (Figure 4).

- Environmental Health Specialists (EHS) – 74% (198/268)
- Community Injury Prevention (IP) Specialists – 13% (35/268)
- Institutional Environmental Health (IEH) Specialists – 13% (35/268)

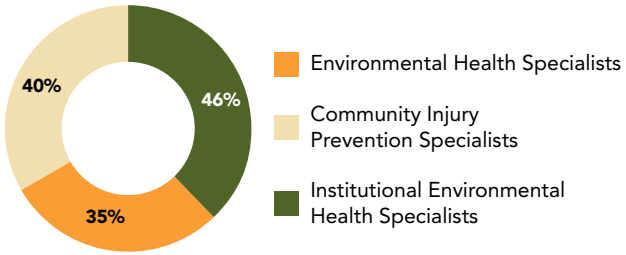
Federal and tribal staff with master's degrees in Environmental Health or a related field.

- Total – 37% (100/268)
- Federal – 52% (68/131)
- Tribal – 25% (34/137)

Staff with master's degrees by specialty (Figure 5).

- EHS –35% (70/198)
- Community IP Specialists – 40% (14/35)
- IEH Specialists – 46% (16/35)

Figure 5: Percentage of environmental health staff with master's degrees.



Federal and tribal staff who are Registered Environmental Health Specialists or Registered Sanitarians (REHS/RS).

- Total – 53% (143/268)
- Federal – 60% (79/131)
- Tribal – 47% (64/137)

Staff with REHS/RS by specialty (Figure 6).

- EHS – 60% (118/198)
- Community IP Specialists – 20% (7/35)
- IEH Specialists – 51% (16/32)

Federal and tribal staff with additional credentials (Table 5).

- Child Passenger Safety Technicians – 24% (63/268)
- IHS IP Fellowship Program Graduates – 10% (28/268)
- Certified Pool Operators – 9% (25/268)
- FDA Standard – 4% (12/268)
- Certified Professional in Food Safety – 3% (9/268)

Figure 6: Percentage of environmental health staff with REHS/RS credentials.

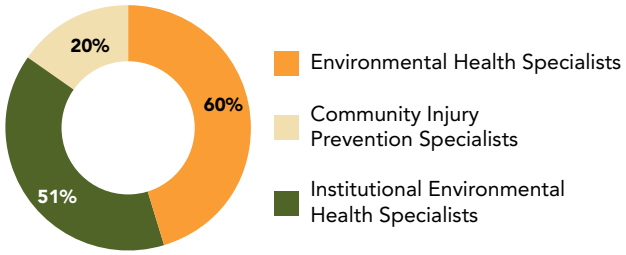


Table 5: Summary of Certifications Held by Federal and Tribal Staff.

Certification	Environmental Health Specialist	Community Injury Prevention Specialist	Institutional Environmental Health Specialist	Total	Percent of total
REHS/RS*	118	7	18	143	53%
IP Fellow	21	6	1	28	10%
Certified Safety Professional	6	1	3	10	4%
Certified Industrial Hygienist	1	0	6	7	3%
Child Passenger Safety Technician	50	12	1	63	24%
Certified Playground Safety Inspector	4	0	0	4	1%
Certified Radiation Protection Surveyor	2	0	3	5	2%
Certified Environmental Health Technician	3	0	0	3	1%
FDA Standard	12	0	0	12	4%
Lead/Asbestos Certification	8	1	2	11	4%
IEH Residency	7	1	6	14	5%
Certified Pool Operator	24	1	0	25	9%
OSHA 40 Hr HAZWOPER**	11	0	3	14	5%
Healthy Homes Specialist	5	0	0	5	2%
Certified Professional in Food Safety	9	0	0	9	3%

*Registered Environmental Health Specialist/Registered Sanitarian
**Hazardous Waste Operations and Emergency Response

Recognition

There are several awards the federal and tribal staff may earn in recognition of contributions and achievements toward IHS goals, objectives, and the completion of significant activities. Table 6 summarizes awards received by federal and tribal staff in 2023.

Table 6: Summary of Awards Received by Federal and Tribal Staff.

Award Type	Federal	Tribal	Total
Public Health Service Awards	6		6
Indian Health Service Area Awards	1		1
Civil Service Personnel Awards	5		5
National IHS Awards			0
Other National Awards			0
Tribal Awards			0
TOTAL	**12**	**0**	**12**

INDIAN HEALTH SERVICE ENVIRONMENTAL HEALTH SPECIALIST OF THE YEAR

Beginning in 1993, DEHS has annually recognized an outstanding Environmental Health Specialist (EHS) for the year. Nominees are scored on two major categories: special achievements and professionalism. The achievements of those individuals who have been selected as EHS of the Year are recognized by their peers as being instrumental in advancing the DEHS Program's vision of improving the lives of AI/AN people through model public health practices. A list of all the national EHS of the Year recipients to date can be found in Table 7.

Table 7: EHS of the Year, 2023 through 1993

2023	Justice Lambon, Phoenix Area IHS
2022	Joseph Sarisky, Bemidji Area IHS
2021	Braden Hickey, Albuquerque Area IHS
2020	George Chung, Phoenix Area IHS
2019	Robert Morones, Phoenix Area IHS
2018	Timothy Taylor, Bemidji Area IHS
2017	Kate Pink, Phoenix Area IHS
2016	Michael Reed, Great Plains Area IHS
2015	Sarah Snyder, California Area IHS
2014	Landon Wiggins, Phoenix Area IHS
2013	Martha Maynes, Bemidji Area IHS
2012	Lisa Nakagawa, California Area IHS
2011	Bryan Reed, Bristol Bay Area Health Corp.
2010	Amanda M. Parris, Phoenix Area IHS
2009	Timothy Duffy, Bemidji Area IHS
2008	Holly Billie, Phoenix Area IHS
2007	Stephen Piontkowski, Phoenix Area IHS
2006	Troy Ritter, Alaska Native Tribal Health Consortium
2005	Andrea Horn, Phoenix Area IHS
2004	Celeste Davis, Albuquerque Area IHS
2003	Casey Crump, Bemidji Area IHS
2002	Pete Wallis, Tanana Chiefs Corporation
2001	Molly Patton, Tanana Chiefs Corporation
2000	Shawn Sorenson, South East Alaska Regional Health Corp.
1999	Mike Welch, Phoenix Area IHS
1998	Diana Kuklinski, Phoenix Area IHS
1997	Mark Mattson, Bemidji Area IHS
1996	Harold Cully, Oklahoma Area IHS
1995	Keith Cook, Navajo Area IHS
1994	Carol Rollins, Ho-Chunk Nation
1993	John Sarisky, Navajo Area IHS

Individuals who received the Area EHS of the Year (2023) were:

Connie Giroux
Great Plains Area

Justice Lambon
Phoenix Area

2023 ENVIRONMENTAL HEALTH SPECIALIST OF THE YEAR – JUSTICE LAMBON, MPH, REHS, CPH

LT Justice Lambon, MPH, REHS, CPH was selected as the 2023 Environmental Health Specialist of the Year. LT Lambon partnered with Colorado River Service Unit leadership to conduct a comprehensive audit of the facility's green-house gas emission hotspots and identified four key areas that impact the hospital's carbon footprint. Additionally, he responded to a legionella investigation involving a regional health care facility and served in the health care incident command team during a service unit-wide network outage. LT Lambon led a novel drive-thru rabies vaccination clinic, manages the service unit's arbovirus surveillance program, and has fully embraced the division's injury prevention efforts which includes child passenger safety, a firearm safety pilot project. He also conducted elder fall and fire prevention training. Lambon's performance, dependability and willingness to go above and beyond have allowed him to forge lasting relationships with tribal partners and deliver highly impactful environmental health services.

RICK SMITH INJURY PREVENTION AWARD

Beginning in 2019, DEHS has annually recognized leaders in injury prevention. The purpose of the award is to recognize the performance of individuals or groups whose special efforts and contributions in the field of injury prevention resulted in a significant impact and led to improved public health for American Indians and Alaska Natives.

Table 8: Smith Award Winners, 2023 through 2019

2023	Sisseton Wahpeton Oyate - Tribal Opioid Response Team, Great Plains Area IHS
2022	Monte Yazzie, Salt River Pima-Maricopa Indian Community, Phoenix Area
2021	Medication Disposal Team, Bemidji, Oklahoma City, and Phoenix Areas IHS
2020	Debbie Whitegrass Bullshoe, Blackfeet Nation, Billings Area
2019	Robert Morones, Phoenix Area IHS

2023 SMITH AWARD WINNER – Sisseton Wahpeton Oyate - Tribal Opioid Response Team

The Sisseton Wahpeton Oyate - Tribal Opioid Response Team, at the Asniyapi Clinic, received the 2023 IHS Rick Smith Injury Prevention Award. They are recognized for addressing the overdose crisis in tribal communities by increasing access to medication, supporting prevention, harm reduction, treatment and recovery support service for opioid use disorder.

Team Members

- Jocelyn (Josie) Deutsch Reints, Certified Nurse Practitioner, Medication for Opioid Use Disorder Provider
- Aaron Erdrich, Registered Nurse
- Kimberly Keeble, Care Connector
- Joshua Max, Project Manager/Data Specialist
- Sara DeCoteau, Project Director

GARY J. GEFROH SAFETY AND HEALTH AWARD

CAPT Gary J. Gefroh was a nationally recognized and highly respected Institutional Environmental Health (IEH) Officer. He served the IHS for 20 years providing expert technical consultation in the fields of healthcare accreditation, safety management, infection control, and industrial hygiene. The purpose of the Gary J. Gefroh Safety and Health Award is to recognize significant contributions by an individual or group resulting in improved healthcare safety and/or infection control at an IHS or tribal healthcare program. This award is sponsored annually by the Office of Environmental Health and Engineering.

Table 9: Gefroh Award Winners, 2023 through 2008

Year	Winner	Profession	Area/Facility
2023	Lea Luper	Infection Preventionist	Chickasaw Nation Dept of Health
2022	David Bales	EH Officer	Oklahoma City Area
2021	Katherine Hubbard	Senior Institutional Environmental Health Consultant	Alaska Native Tribal Health Consortium
2020	Michelle Livingston	Infection Preventionist	Portland Area
2019	Francis Robinson	Safety Officer	Phoenix Area
2018	Jeffery Conner	IEH Officer	Navajo Area
2017	Chris Kates	IEH Officer	Oklahoma City Area
2016	Matthew Ellis	IEH Officer	Portland Area
2015	Emily Warnstadt	Dental Hygienist	Portland Area (Team Award)
2015	Angel Daniels- Rodriguez	Medical Technologist	Portland Area (Team Award)
2014	Brian Hroch	IEH Officer	Albuquerque Area
2013	Greg Heck	Safety Officer	Phoenix Indian Med. Ctr.
2012	Jeff Morris	IEH Officer	Chickasaw Nation Div of Health
2011	Tim Duffy	IEH Officer	Bemidji Area
2010	Wayne Keene	Safety Officer	Northern Navajo Med. Ctr.
2008	David Cramer	Safety Officer	Phoenix Indian Med. Ctr.

2023 GEFROH AWARD WINNER – LELA LUPER

Lela Luper, Infection Prevention and Control Manager, Chickasaw Nation Department of Health, received the 2023 Gary J. Gefroh Safety and Health Award. Ms. Luper achieved significant accomplishments and contributions within multiple roles, resulting in improved health care safety and infection control conditions. They are evident, not only at the local rural health care level with the Chickasaw Nation Department of Health, but also at the national level with expert contributions and leadership with the Association of Professionals in Infection Control and Epidemiology, among others.

DEHS Services

Core Services to AI/AN Communities

The DEHS is a comprehensive, field-based program with an overarching responsibility to provide community environmental health support. We are leaders in the environmental health profession who provide a range of services on water quality, waste disposal, hazardous materials management, food safety, community injury prevention, vector control, occupational safety and health, and other environmental health issues.

A snapshot of activities related to these services include (Figure 7):

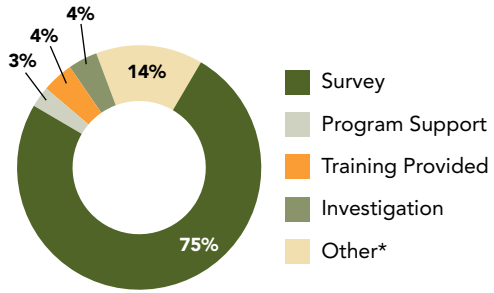
- Approximate number of establishments[1] – 22,000
- Staff recorded activities – 9,305*
  - » Surveys – 75% (6,970/9,305)
  - » Program support – 3% (325/9,305)
  - » Training provided – 4% (351/9,305)
  - » Investigations – 4% (401/9,305)

*Contributing factors to increased activities reported from prior year include the COVID pandemic and WebEHRS establishment type definition changes.

The DEHS uses the Custom Data Processing, Inc., Environmental Health Inspection Management System to operate the DEHS Web-based Environmental Health Reporting System (WebEHRS). Features include electronic survey capabilities, tracking environmental health activities, a myriad of report functions, and a mobile application for field use. In 2022, WebEHRS Mobile[2] was a significant upgrade to the previous mobile application. In 2023 efforts began to increase the use of the Mobile[2] application. These upgrades and increased use will generate more comprehensive system use and supports the DEHS/IHS data system modernization and quality priorities.

The DEHS manages the Notifiable Disease and External Cause of Injury (NDECI) web-based data retrieval system. NDECI tracks and reports specific disease and injury categories that can provide reports by national, Area, Service Unit (SU), facility, and community levels. Data can be retrieved by International Classification of Diseases (ICD), 10th Revision, codes used to define the groupings for asthma, notifiable diseases, intestinal diseases, vectorborne diseases, and injuries. In 2017, an initiative began to update NDECI with ICD10 codes and transition to new business intelligence software. The new platform was designed and fixes were implemented in 2018. The upgrade was piloted in 2019–2020, with system refinements in 2021, and then launched in 2022. NDECI provides DEHS staff an environmental health relevant dashboard of key health indicators from which to monitor public health status and enhance the ability to run ad-hoc reports tailored to program needs.

Figure 7: Activities completed in 2023 as reported in WebEHRS.



* Other includes: Mobilize Community, Policy Development, Sample/Test, Evaluation, Control, Training Received, Consultation/Professional Advice, Data Collection/Surveillance, Write-up Interventions.

1 WebEHRS Reports, National Establishment Counts 2023 (excludes Headquarters items)

SPECIALIZED SERVICES TO AI/AN COMMUNITIES

The DEHS provides specialized services in IP and IEH through consultation and technical assistance. IP Specialists take the lead in working with communities to develop public health strategies to reduce the burden of injury experienced by AI/AN communities. IEH Specialists have skills to identify, evaluate, and respond to unique environmental safety hazards found in healthcare, educational, childcare, correctional, and industrial facilities. Accomplishments for the two specialized services can be found in this section of the report.

Community Injury Prevention Program

Implementation of IP interventions using a comprehensive approach is effective. Successful IP interventions incorporating all strategies (education, legislation, enforcement, and environmental modification) can have the most impact to improve public health. There were several IP projects and interventions implemented by the Areas in 2023:

- Motor vehicle injury prevention effective strategies
- Unintentional elder falls prevention programs (exercise, home safety assessments, clinical)
- Opioid overdose prevention projects (home lockbox, medication disposal units)
- Determining magnitude of the injury problem (e.g., injury atlas)
- Child death prevention
- Short courses were updated and offered in-person and virtually
- IP media gallery (images, infographics, brochures, etc.) available

The IHS Tribal Injury Prevention Cooperative Agreement Program (TIPCAP) started in 1997 to help tribes/tribal organizations build IP infrastructure and capacity. TIPCAP applies the public health approach to employ effective strategies that address education, policy development with enforcement and environmental modifications to ensure effective and sustainable programs. TIPCAP projects address the IHS IP program priorities of motor vehicle injury prevention and unintentional elder fall prevention. It also supports local tribal community IP priorities such as suicide prevention, violence prevention, drowning prevention, helmet use, poisoning prevention, and fire safety.

The 2021–2025 TIPCAP funding cycle began with 27 tribes or tribal programs from 11 IHS Areas being awarded a cumulative total of $2.4M per year. Injury topics addressed include motor vehicle related injuries, falls, and other emerging issues based on tribal needs. These could include, poisoning/opioids, suicide, traumatic brain injury, or drowning.

Institutional Environmental Health Program

The mission of the Institutional Environmental Health (IEH) program is to provide leadership in the development and implementation of effective environmental health and safety management systems to: 1) reduce risks of injury and/or illness to clients, employees, and visitors of community institutions; 2) to protect our environment; and 3) to minimize property losses. The IEH Program staff offer services in federal and tribal healthcare facilities, as well as a range of community facilities such as childcare, school, and elder programs. A primary objective is to support local safety programs by providing education, onsite technical support, accreditation assistance, and program evaluation.

In 2023 updates to the IHS Indian Health Manual, Part 1, Chapter 9 - Occupational Safety and Health Program were finalized and rolled-out. The chapter establishes the Occupational Safety and Health responsibilities and functions of the Indian Health Service, defines program elements, to provide a safe and healthy environment for patients, visitors, and contractors. The primary focus is the protection of IHS employees' and contractors' safety and health, with ancillary benefits for protection of IHS patients and visitors.

The IEH Program provides extensive technical assistance and training to safety and facility management staff as well as the many inter-related medical program and leadership staff. These efforts have led to a reduction in the IHS total occupational injury & illness case rate, which has continued to decrease from 4.35 injuries/100 employees in 2004 to 2.32 injuries and illness/100 employees in 2023.

Reduction in IHS injury/illness rate

2004	2023
4.35/100 employees	**2.23/100** employees

DEHS National Focus Areas

The DEHS delivers a comprehensive EH program to more than 2.6 million AI/AN people in 37 states. We consult with and provide technical assistance to tribes in an effort to provide safe, healthy environments. This section of the report describes each of the focus areas and highlights projects conducted by the IHS Areas in 2023. Evidence-based or promising practices are used most often, but specific projects are also evaluated for effectiveness. Comprehensive interventions use a multi-targeted approach involving education, environmental modification, legislation, and enforcement.

Four common activities are related to each focus area:

- Conduct inspections that identify EH risk factors
- Recommend corrective actions to reduce or eliminate risk factors
- Investigate disease and injury incidents
- Provide EH training classes to federal, tribal, and community members

5 Focus Areas

Childern's Enviroment
Prevent illness and injury by reducing risk factors where childern live, learn and play

Safe Drinking Water
Prevent waterborne illness and ensure safe drinking water supplies

Food Safety
Prevent foodborne illness and promote food safety and security

Vectorborne and Communicable Diseases
Prevent diseases transmitted by insects, animals, humans, and the environment

Healthy Homes
Prevent diseases and injuries in homes caused by unhealthy living conditions

Children's Environment

The DEHS is responsible for ensuring EH settings for AI/AN children are safe and ultimately provide a healthy environment in which to learn, play, and grow. EH issues associated with children are present in schools, Head Start Centers, and childcare facilities on tribal lands. These issues present an ever-increasing set of complex challenges to be addressed. A few examples of EH-related issues of concern are as follows: indoor air quality, lead exposure, child passenger safety, and infectious disease exposure. The DEHS staff provides services to approximately 3,000 child-occupied facilities as well as services in community housing. Comprehensive interventions, based on local surveillance, are conducted to reduce the impact of disease and injury in the communities.

Many indicators of effective programs focus on reducing the number of critical or repeat violations within a particular facility. Critical violations are threats to the public's health that need to be corrected immediately, and repeat violations occurred in more than one consecutive facility inspection. The DEHS staff focus on eliminating risk factors related to fire safety, emergency response, asthma triggers, lead-based paint, communicable disease exposure, and child passenger safety.

Playground Safety Training for Head Start

Charley Mitchell-Tsosie
Navajo Area

Introduction

According to the Consumer Product Safety Commission (CPSC) each year more than 206,700 injuries to children under the age of 16 occur on playgrounds. The CPSC investigated 43 deaths associated with playground equipment that happed since 2014. Two-thirds of those reported injuries involved falls or equipment failures.

Methods

The Navajo Nation Head Start program provides services to children and local communities throughout the Navajo Reservation. I developed a playground safety presentation for Head Start staff. The presentation highlighted playground safety guidelines. The guidelines will help faculty and staff identify high priority hazards that contribute to playground injuries to children. Guidelines referenced the following:

- Public Playground Safety Handbook
  - » Safety information for public playground equipment in the form of guidelines
  - » This presentation is expected to promote greater safety awareness among those who purchase, install, and maintain public playground equipment
  - » Intended for use by
    - ◊ Childcare Personnel
    - ◊ School Officials
    - ◊ Equipment Purchasers and Installers

- American Society for Testing and Materials (ASTM)
  - » Technical performance standard that relate to playgrounds

Topic presented

High Priority

- Inadequate fall surfacing
- Entanglement hazard
- Protrusion hazard
- Head entrapment hazard

Loose-Fill Depth and Critical Fall Height

- Each type of equipment has a fall height
- Normally the highest designated play surface of that piece of equipment
- Grass and dirt are not considered protective surfacing because wear and environmental factors can reduce their shock absorbing effectiveness
- Refer to ASTM F1292 for the appropriate playground protective surface

Use Zones
- Use-Zone – area beneath and around play equipment that should be free of play equipment or other obstacles
- Stationary equipment, Slides and Swings have different requirements
- Stationary- 6ft (72 inches) around perimeter
- Overlapping with neighboring equipment use zones – depends on type and height of equipment
  - » Can overlap if both pieces of equipment have a designated play surface that is 30 inches or less above fall surface, use zones may overlap as long as the equipment is at least 6ft apart
  - » If either structure has a designated play surface greater than 30 inches tall, the equipment must be at least 9ft apart (108 inches) or 50% overlap

Slides
- If slide is 6ft tall or less, the use zone at the exit zone should be 6ft
- If slide is greater than 6ft tall, the use zone at the exit zone should be at least as long as the slide is high, up to a maximum of 8ft

Swings
- Swings fall height is measured from the pivot point to the fall surfacing
- Swing use-zone is Height x 2 = Use Zone
- Clearance: 12 inches from seat to surface
- Use zones in front or rear may never overlap
- Use-zone on sides
  - » 6ft can overlap

Results

Incorporating an annual playground safety training to Head Start staff increased the knowledge and understanding of the playground safety guidelines. Highlighted topics were loose-fill depth and critical fall height, use zones, slides, and swings. Identifying the need for necessary safeguards and identifying the lack of safeguards will contribute to reducing playground related injuries to children from playground equipment.

Discussion

This training increased the knowledge of the Head Start faculty and staff to assist in injury prevention surrounding playground equipment. The training highlighted the essential playground safety guidelines to ensure steps are taken to minimize injuries to children associated with playground equipment. With the information given facilities may explore options to certify members of their faculty and staff. The National Recreation and Park Association offers an up-to-date playground safety program to become a Certified Playground Safety Inspector.

Conclusion/Recommendations

An annual playground safety training for Head Start faculty and staff at the beginning of each school year and a refresher training throughout the school year is recommended.

Encourage each facility to develop a Playground Safety checklist that best suits their playground equipment. Playground safety checklist can be found in the Public Playground Safety Handbook. There are two types of inspections that each facility can conduct throughout the school year. Facilities can assign a staff member(s) to conduct a walk-through of the playground, rotating duties each week or day.

Two-Types of Inspections

Low-Frequency
- 2-3 times per year (in depth) that focus on preventative maintenance
- Annual comprehensive surveys

High-Frequency
- Daily or even 2x/day
- Depends on
  - » Age
  - » Usage
  - » Repetitive accidents patterns
  - » Age of equipment

Safe Drinking Water

The DEHS is one of the partners responsible for ensuring safe drinking water for AI/AN people. EH issues associated with drinking water can be caused by organisms or contaminants spread through water. Examples of waterborne illnesses include giardiasis, shigellosis, cryptosporidiosis, lead poisoning, and copper toxicity. Annually, the DEHS staff report 50-100 activities related to drinking water.

There were no projects with an emphasis in safe drinking water reported in 2023. The DEHS staff also focused on eliminating risk factors related to the operation and maintenance of water systems.

Food Safety

The DEHS staff provide services at more than 5,000 food service facilities across the country. The CDC estimates over 48 million cases of foodborne illness occur in the United States annually,128,000 of which require hospitalization and 3,000 of which are fatal. Organisms that result in the most common foodborne illnesses include Norovirus, *Salmonella*, *Clostridium perfringens*, *Campylobacter*, and *Staphylococcus* aureus (CDC, Estimates of Foodborne Illness in the United States, 2011, available at: http://www.cdc.gov/foodborneburden/2011-foodborne-estimates.html).

Effective programs focus on reducing the number of critical or repeat violations within a particular facility. Critical violations are threats to the public's health that need to be corrected immediately, and repeat violations occurred in more than one consecutive facility inspection. Some DEHS staff focus on eliminating risk factors related to inspector bias through standardization of the inspection process. Other staff work to persuade tribal councils to pass food code legislation, whereas others focus on eliminating specific deficiencies (e.g., temperature control, hand washing, and/or employee health).

ServSafe Certified: Elevating Food Management in Minnesota

Joseph Sarisky, Brady Stidham
Bemidji Area

Introduction

Food safety is one of the five national priorities for the Indian Health Service, Division of Environmental Health Services. The national performance measure tracking food safety on the Web-based Environmental Health Reporting System (WebEHRS) is the Certified Food Protection Manager (CFPM) certification. This certification ensures a level of knowledge that is critical to preventing foodborne illness outbreaks. In 2022 the Minnesota District Office (MDO) had all staff members ServSafe certified as Food Protection Managers to Proctor the CFPM exam. The ServSafe Manager's exam is broken down into seven food safety categories. The goal of this project is to identify the lowest scored categories, while implementing a standardized and efficient system to provide this course. By accomplishing this, we expect to reach 100% CFPM certification at food establishments for the Bemidji Area.

Methods

Early 2023 meetings were held at MDO to address the following:

- communication with tribal contacts for scheduling ServSafe CFPM courses
- a checklist of materials to bring to every session was created (projector, laptop, exams, etc.)
- emphasis on the importance of reading the course book prior to the exam and how best to present the material for the exam to obtain maximum success

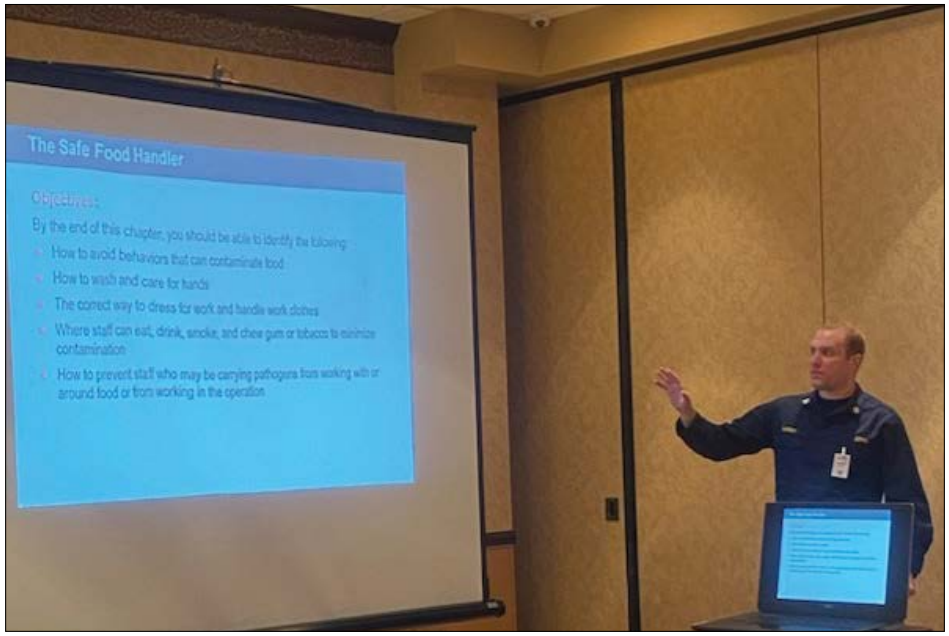
An email template with guidance of when to start communication for scheduling was created and shared with other employees in the Bemidji Area so that this method could be replicated.

Results

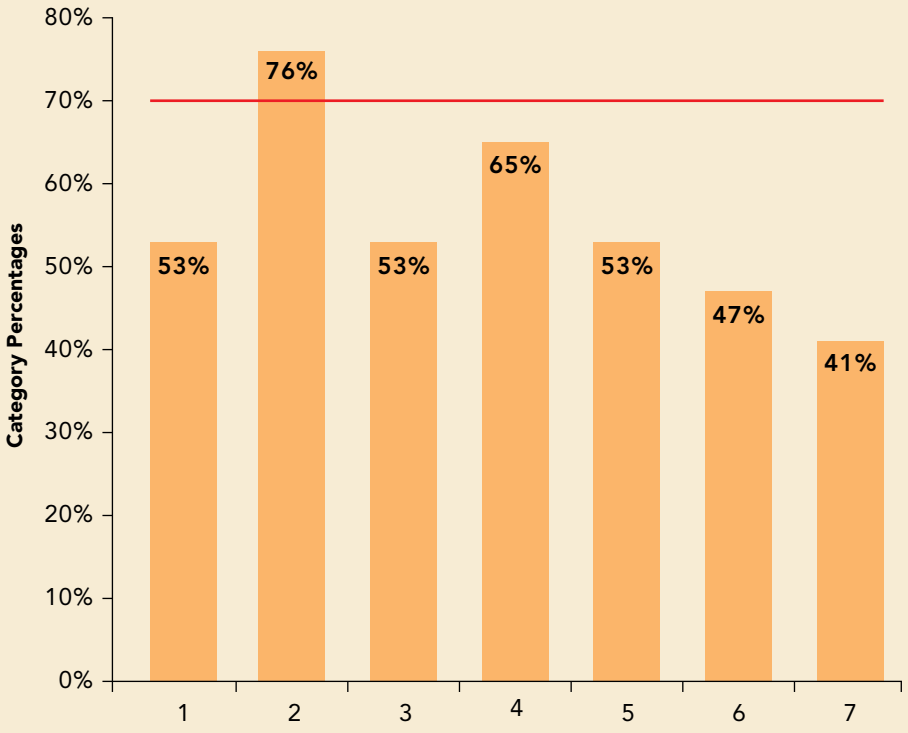
We provided a total of 17 classes with 138 participants for 2023. Of the 138 participants, 77 passed the ServSafe Manager's Course and became a Certified Food Protection Manager.

The ServSafe certification exams are broken down into seven categories

1. Management of Food Safety Practices
2. Hygiene and Health
3. Safe Receiving, Storing, Transportation, and Disposal of Food
4. Safe Prep and Cooking of Food
5. Safe Service and Display of Food
6. Cleanliness and Sanitation
7. Facilities and Equipment



ServSafe Category Passing Percentage



These seven categories are addressed in the provided training. After a ServSafe course is completed we receive an average percentage for each category per class. Next we combined the passing percentage per category across all classes. Our highest category for 2023 was Hygiene and Health (76%) with our lowest category being Facilities and Equipment (41%).

Discussion

The classes that were unsuccessful often did not purchase the books, had old books, or received books without answer sheets included. It was also observed that students who did not read the book prior to the exam did not score well. With our standardized communication emphasizing required materials, this should result in less issues moving forward and increased success rates. Additionally, establishments will try to get their whole staff certified, when it is only the manager or person in charge who needs the certification and likely has the expertise to pass. This seems to result in a lower pass rate when classes have participants with minimal food experience. One way to improve future exam scores would be to not require a minimum participation amount per class, but rather ensure it is the food establishment managers who take the exam.

Conclusion/Recommendations

The improved communication with tribal contacts and the proper amount of time for all participants to read and review the material in the ServSafe book, would be very beneficial. The next development would be to address which category scored lowest on average, and increase these scores by incorporating adult learning theory and adjusting our teaching towards the least successful categories. The goal in this next phase is to raise all category averages to 70% or greater.

Active Managerial Controls Pilot

Shelby Haddeland, Veronica Leaf-Bellile, Connie Giroux
Great Plains Area

Introduction

The FDA Food Code identifies Active Managerial Controls (AMC) as a tool for controlling foodborne illness risk factors. This project focused on revising existing AMC materials for a pilot project at a casino complex and assisting casino management with implementation of the AMC program. The goal of this pilot project is to provide casino management with resources to help control risk factors in their food establishments through proactive management practices. With implementation of this program, it is anticipated that a decrease in violations will be observed during routine surveys at the facility.

Methods

Materials for the AMC program were developed and include the following:

- program fact sheet
- food manager pre-test
- guidance document on how to conduct a focused AMC survey
- AMC survey form
- daily self-inspection log
- template certificate of excellence

The program was piloted at a casino containing three food establishments. During the initial presentation, the AMC program was introduced. The pre-test was completed to assess the program's suitability for one food establishment on site. A customized implementation plan was discussed based on the results.

Set employee expectations.
Example: The hot holding food policy at a buffet requires cooked foods to be kept at 135 °F or above and cannot be hot held for more than 4 hours.

Train employees on the policy and practice procedures.
Example: An employee checks is food is fully cooked with a thermometer and once safe, it is kept in a hot holding unit at 135 °F on the buffet.

Staff use a self inspection logs managers spot check the log.
Example: Employees review time and temperature logs, record food temperatures every two hours to ensure 135 °F is maintained, and discards items hot held for hours.

What will the staff or manager do if a deficiency is found?
Example: The manager reviews the buffet's time and temperature log and notices some food item times are not being documented past the tow-hour mark. The manager discusses the issue with staff and refers to the policy to correct the problem.

Results

During the AMC presentation, the Safety Officer and Food & Beverage Manager expressed interest in implementing AMC in on of their food venues. To begin the process, the two managers took a pre-test consisting of eight questions that covered equipment, preventative maintenance, procedures, employee health and verification, and food manager certification. The pre-test is a modified version of a large county health department document. It provides a numerical score indicating a facility's baseline for AMC implementation. The managers rated their facility at 80 and 85, indicating that the facility falls within the "room for improvement" category shown on the graphic below. The scores were impacted due to the absence of formal policies and procedures. Also, the COVID-19 pandemic disrupted routine food safety trainings. Both managers agreed with the findings of the pre-test. However, ongoing renovations and staffing issues have caused a delay with policy development, which is an important first step in AMC implementation.

FDA Food Code Active Managerial Controls scoring system and description

120-160 Points	Your facility is practicing AMC by setting up policies, training employees, using monitoring practices, and applying corrective actions. For any (N) answered, review that question and consider adding that additional practice to your AMC routine.
65-115 Points	Your facility is almost there! There are a couple of AMC practices in place to maintain food safety, but there is room for improvment. For any (N) answered, review that question and consider adding that additional practice to your AMC routine.
0-60 Points	Your facility is not yet familiar with AMC, but it is not too late to get started! Consult with your Environmental Health Specialist and he/she can guide your facility through the available AMC resources provided by the Health Department

Discussion

Although casino management was onboard to implement the AMC program, uncontrollable factors such as construction activities and staffing shortages, hindered implementation efforts. During the implementation process, it was identified that several updates are still needed to the AMC program materials, and further development of some sections were needed. For example, the scoring system was incorrectly quantified, and policy templates would be helpful materials to have prepared for AMC program facilities. Internal discussion is needed to determine how to recognize facilities that implement and maintain their AMC program.

Conclusion/Recommendations

Although the AMC program is not fully implemented at the selected facility, the pre-test and discussions successfully identified the needs of the food service program. In addition, it was a fruitful experience to understand how the AMC materials that were developed can be refined. Some revisions have been completed already. Another benefit was IHS staff were able to conduct more open conversations with casino management about the risks of foodborne illness. The implementation process will continue at the facility once renovations are complete.

RAGBRAI 2023 – Interagency Coordination of a Large-Scale Event

Connie Giroux
Great Plains Area

Introduction

The 50th anniversary of Register's Annual Great Bicycle Ride Across Iowa (RAGBRAI) occurred in July 2023 with approximately 29,000 bicyclists registered and an unknown number of unregistered riders. The safety of the health inspectors and attendees was critical when planning for this statewide event. The risk of a foodborne illness outbreak occurring was high so coordination between various agencies was critical to help mitigate this risk. At least eight different agencies coordinated their efforts and were either part of the Incident Command System (ICS) group, conducted health inspections, provided support, or involved with multiple duties. Agencies included IA DIAL, FDA, HHS, IHS, IDALS, HSEMD, DNR, and LCA. On day five of the event, myself, along with four state health inspectors, completed risk-based food safety inspections of food vendors set up in the Tama-Toledo area.

Methods

Planning meetings were held well in advance of the RAGBRAI event. ICS roles were finalized and the following objectives were implemented: 1. Reduce likelihood of injury or harm to participants, support staff, and inspectional staff for the entire operational period. 2. Minimize potential for foodborne illness by conducting risk based food safety inspections for the entire operational period. Daily ICS operations briefings were held during the event. Being part of the Iowa Food Protection Task Force, my role expanded during RAGBRAI to serve on the ICS team and complete the risk-based food safety surveys of the temporary food vendors set up at a tribal casino.

Results

No foodborne illness complaints were received for temporary food vendors that were set up at the tribal casino. No foodborne illness outbreaks were reported during or at the conclusion of the RAGBRAI event. The use of ICS proved to be a very useful tool for planning and response activities. Some of the newer state environmental health staff, as well as some of the staff working RAGBRAI for the first time, were not familiar with ICS. There was some confusion initially regarding the structure, purpose, and roles in using ICS. State health officials worked directly with the state staff to answer their questions and ensure that everyone knew their rolls and who to report to. The main issues that I encountered during the surveys of the temporary food vendors were the lack of handwashing stations set up prior to preparing and serving foods and improper cold holding temperatures of food products. Due to the heat and humidity on the day the event rolled through the Tama-Toledo area, food vendors were having a difficult time maintaining cold holding temperatures. Time/temperature control measures were discussed with vendors to help mitigate the risk of improper cold holding temperatures. Overall the surveys were done efficiently and effectively and were well-received by all of the food vendors.

Discussion

The use of ICS for a large-scale event proved to be an effective tool for planning and response. Planning meetings allowed for all of the jurisdictions to be on the same page and know who their lead contacts were. This was also useful for response planning in the event of an emergency or foodborne illness outbreak. Using ICS for large-scale tribal events, such as powwows and fairs, may provide an organized structure for event committees to use for planning and response activities.

Conclusion/Recommendations

Coordination across multiple jurisdiction was crucial for planning and responding to incidences during RAGBRAI. Making those connections early in the process was highly valuable for our program and allowed for a smooth integration of our program into the planning process. ICS should be considered by tribal committees when planning for large powwows and events.

Vectorborne & Communicable Diseases

Diseases transmitted through humans, insects, or animals present an ever-increasing burden on human health. A few examples of vectorborne or communicable diseases include West Nile virus, H5N1 (Avian Influenza), hantavirus, Rocky Mountain spotted fever, and plague.

The DEHS staff work on the elimination of risk factors by enhancing hazardous communications, reducing safety risk factors, enhancing tribal capacity, and conducting case investigations. Projects with an emphasis on vectorborne and communicable diseases conducted in 2023 are on the following pages.

Addressing Suicide Prevention through Cultural Protective Factors

Samantha Claw, Zoey McKenzie
Navajo Area

Introduction

For the 2021-2025 Injury Prevention Performance Measure (education), the Shiprock Service Unit Department of Environmental Health Services (SSU DEHS) created a project to decrease suicide by providing the gatekeeper training, Question Persuade Refer (QPR), and to increase resiliency by providing the Navajo Wellness Model training. Tribal life philosophy is often overlooked when implementing injury prevention efforts. Death and disabilities from unintentional injuries is of great concern for Native American people and is an area of great health disparity. Suicide on the Navajo is listed as one of the top five injuries/fatalities. Traditionally suicide in the Navajo culture is considered a taboo subject and not always addressed. The philosophy most Navajo people practice can be referred to as the Navajo Wellness Model. The Model is based on the Navajo Philosophy: "a journey with wellness and healthy lifestyle guided by the journey of the sun". The teaching is based on Living in Beauty, Hozhoogo iina. With permission and acknowledging that suicide is a taboo subject, staff informed the participants that suicide will be discussed in a prevention mindset. The Navajo Wellness Model has the Navajo core teachings about personal health, family health, wellness and lifestyle.

Methods

Prevention efforts included becoming certified Navajo Wellness Model presenters as well as Question Persuade Refer Instructors. Staff also informed participants that the Navajo Wellness Model will be presented to close out the presentation in a positive way according to the Navajo Wellness philosophy. Becoming a certified Navajo Wellness Model presenter and a Question Persuade Refer instructor were accomplished by Samantha Claw, Service Unit Sanitarian, Randy John, Public Health Advisor, and Zoey McKenzie, Area Injury Prevention Specialist. Both presentations were presented by staff in effort to demonstrate an understanding of the Navajo Philosophy as well to provide a suicide prevention presentation. Program evaluation will be completed for participant pre and posttests through a collaboration with Dine College and John Hopkins University.

Results

A Question Persuade pre-training and post-training survey was given to participants. The comments section in the survey referred to how receptive the participants were to suicide prevention based on the Navajo Wellness Model presentation.

Discussion

The social identity theory and the idea that feeling connected can enhance sense of self and self-esteem. Having a strong tie to one's cultural identity might also strengthen social support networks within families or communities of shared cultural background. Staff implementing injury prevention efforts are encouraged to demonstrate an understanding of the manner in which various tribes perceive health and illness and respond to various prevention efforts. This project will increase resilience skills and provide gatekeepers thereby assisting and strengthening impacted population. It will also increase suicide prevention skills and decrease hopelessness.

Conclusions/Recommendations

Interventions and prevention efforts should include incorporating tribal identity and tribal values. Harnessing tribal identity to support our suicide prevention and injury prevention efforts suggests that reaffirming cultural identity could also be an effective means of empowering tribal injury prevention efforts.

Personal Flotation Devices in California

Carolyn Garcia
California Area

Introduction

Beginning in December 2022, California was repeatedly deluged by a series of atmospheric river storms. These storms were likely intensified by a warming climate given the atmosphere is able to hold much more moisture at warmer temperatures. The winter storms caused widespread flooding in the state, killed more than a dozen people and put tens of thousands of residents under evacuation orders and watches.[1]

In the spring of 2023, a new layer of consequences emerged as a result of these devastating atmospheric storms. Rivers throughout California surged with record high flows of icy water originating from a melting record-breaking snow pack in the Sierra. A large number of drowning deaths occurred in California as icy melt water sustained high and fast river flows well into July due to a cooler than normal spring.[2,3] The media reported that 39 people had been swept away in the state's rivers in May 2023.[4]

Between 2005-2019, the California drowning death rate was 1.48 with a drowning death rate of 2.84 for California AI/AN during the same period.[5] By comparison, the national drowning death rate was 1.38 for the same time period.[6] Between 2005 and 2019 the average number of drowning deaths per year in California for children ages 0-4 was 57.[5]

During this same timeframe, 52% of California's drowning deaths occurred in rivers, lakes and other natural bodies of water. For children ages 0-4, approximately 20% of the state's drowning deaths occurred in natural bodies of water. Most of the drowning deaths associated with natural water bodies occurred in central and northern California.[5,7]

With hazards such as icy water temperatures, fast flowing water and high flow volumes obscuring debris hazards in rivers, the use of personal flotation devices (PDF) is a primary intervention for preventing accidental drownings.[3]

Methods

In 2022 the California Area Injury Prevention Program began an injury prevention (IP) special project funding initiative where Tribal Health Programs (THP) could apply to receive up to $3500 in IP equipment. The new special project option requires a THP to develop a proposal in partnership with their local Environmental Health Officer and address an injury problem specific to their service area. There is no timeline for special project proposals so programs may submit a proposal at any point in the fiscal year.

In 2023, three THPs submitted proposals for PFD projects. These programs collectively serve 14 tribes in Northern California. The THPs reportedly created project proposals in response to the increase in drowning deaths within their service area. The THPs provided PFDs to tribal children with a drowning exposure risk. PFDs were provided at health fairs and as part of home health visits by Community Health Representatives. THPs evaluated their projects using observational surveys of PFD usage or pre/post education knowledge assessments.

Results/Discussion

In 2023 the California Area IP Program saw a 150% increase in the total number of special IP project proposals it received and a 200% increase in the number of personal flotation device project proposals compared to 2022. The increase in both proposals and PFD projects are directly attributable to a perceived emerging injury threat.

The three projects funded by our program collectively provided a total of 194 life vests. This represents 70% of the total number of PFDs furnished by the California Area IP Program.

Programs performing PFD usage observational surveys saw between 3-28% increase in usage during the reporting period. The program that used pre/post knowledge assessments to evaluate their project had a post self-reported PFD usage rate of 72%. Observational surveys found PFD usage increased to 47%.

Conclusions

In the experience of the California Area Injury Prevention Program, injury threats can rapidly emerge as a consequence of the impacts of climate change. Moving forward, ensuring injury prevention programs have the capacity to rapidly respond with essential resources is an important consideration as tribal communities become increasingly impacted by climate change.

References

[1] Meadows, Robin. "Why California is Being Deluges by Atmospheric Rivers". Scientific American. 11 Jan 2023. https://www.scientificamerican.com/article/why-california-is-being-deluged-by-atmospheric-rivers/

[2] Dance, Scott. "Surging California rivers become a deadly threat, months after storms". The Washington Post. 3 June 2023. https://www.washingtonpost.com/weather/2023/06/03/california-rivers-dangerous-flows-deaths/

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[5] Koon W, Stewart O, Brander R, et al. Inj Prev 2023;29:371–377

[6] CDC WISQARS

[7] California Department of Developmental Services. "Drowning Prevention. 21 June 2023. https://www.dds.ca.gov/initiatives/drowning-prevention/ Accessed 29 Nov 2023.

Wildfire Smoke Toolkit

Aaron Alexander
California Area

Introduction

Since January 2021 there have been over 21,000 wildfires in California that have collectively burned over 3.2 million acres. While wildfires present an immediate threat to people, infrastructure, and buildings, the smoke produced from these fires causes serious public health impacts that can extend hundreds of miles away from the fire's edge. The many factors that affect how wildfire smoke moves such as terrain, ambient temperature and wind makes it difficult to predict when, where and how much wildfire smoke will be present on a day to day basis. The California Area Wildfire Smoke Toolkit was created to provide tribal community members quick access to the public health resources necessary to prepare for and respond to a wildfire smoke event. This project builds upon an initiative started by the Ukiah Field Office Sanitarian, Ivy Beltres, who developed and began delivering community emergency preparedness training in her service area in 2022.

Methods

Public health references were reviewed and compiled into a single guidance document intended for use by the general public. Technical and public publications from CalFire, Centers for Disease Control and Prevention, the California Air Resource Board and the U.S. Environmental Protection Agency were the primary sources for the information contained in the toolkit.

Results

The California Area Wildfire Smoke Toolkit provides information on the harmful components of wildfire smoke and the long and short term health impacts of exposure. In addition, the synergistic health effects between wildfire smoke and extreme heat are included as heatwaves commonly co-occur with wildfires in California. Reliable wildfire smoke surveillance resources and Air Quality Index (AQI) guidance are provided to help community members monitor and act upon AQI reports for their local area. Specific recommended actions are provided for each AQI category along with suggested supplies and equipment useful in mitigating exposure. Recommended interventions are offered using pictures, guidance on proper use and links to selection guidance (e.g. the list of NIOSH Approved N95 respirators).

Discussion

The goal for the California Area Wildfire Smoke Toolkit is to reduce exposure to wildfire smoke. This kit provides tribal community members one stop access to all of the public health guidance they require in order to prepare for and respond to a wildfire smoke event in their area.

The toolkit will be shared with Tribal Health Programs for distribution at community events. In addition, an in-person wildfire smoke training has been developed to supplement the toolkit. This training will be incorporated into in-service trainings and community presentations delivered by our staff as part of the standard environmental health services our program delivers to tribal Head Starts, daycares, schools and elder centers in the California Area.

Results of implementing the Matter of Balance Program for Elder Fall Attitudes and Physical Assessments

Davis Reardon
Billings Area

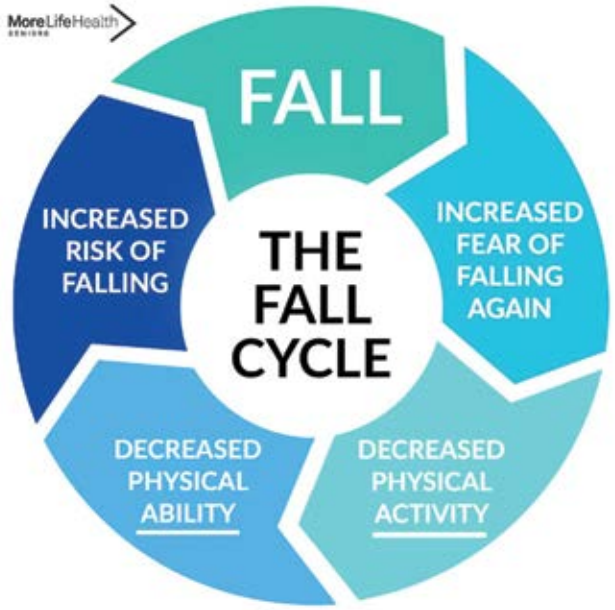
Introduction

American Indian/Alaska Native (AI/AN) populations have a 40% higher death rate from falls compared to the rest of the national population. Although there are multiple evidence-based fall prevention programs, many have not been studied in AI/AN populations, including the Matter of Balance (MOB) program. MOB can provide benefits to elders by decrease the risk of falling, but will still need to be evaluated for tribal members. The aim of the project is to determine if the Matter of Balance program is beneficial and effective for use in AI/AN populations.

Methods

Participants in the MOB program will attend five to eight sessions. These sessions include education about falls, addressing the cause and outcomes of fear of falling, and physical exercises.

A majority of the data will be collected through the standard processes that are part of MOB. This includes worksheets and surveys that are included in the class participation. Some changes will be that some documents will have a pre and post collection for data collection. This aspect that will occur outside of MOB will be through the use of the Berg Balance Scale.



Results

Surveys and questionnaires will be given to elders participating in the Matter of Balance classes, before and after the program. Elder attitudes, home modifications, and fall perception will be included in the questionnaires. Additionally, assessments of balance/strength will be given based off of the Berg Balance Scale.

Pre and post-assessments on changes in activity, strength/balance/gait, and fear of falling will be used.

Catagory	Component	Score
Sitting balance	Sitting unsupported	0-4
Standing balance	Standing unsupported	0-4
	Standing with eyes closed	0-4
	Standing with feet together	0-4
	Standing on one foot	0-4
	Turning to look behind	0-4
	Retrieving object from floor	0-4
	Tandem standing	0-4
	Reaching forward with an outstretched arm	0-4
Dynamic balance	Sitting to standing	0-4
	Standing to sitting	0-4
	Transfer	0-4
	Turning 360 degrees	0-4
	Stool stepping	0-4
Total		**0-56**

Discussion

Research into the effectiveness of MOB has been carried out across the United States. Participants in MOB have a significant reduction in the fear of falling, increased gait speed, and have lower avoidance of activities. Results from the intervention will guide the Billings Area IHS office in the use of Matter of Balance in fall prevention activities.

Conclusions/Recommendations

Matter of Balance is just one of the many options for addressing elder falls in the community.

Addressing OSHA Hazard Communication Deficiencies within Head Start and Childcare Centers

Francis Park
Phoenix Area

Introduction

In FY23, the Phoenix Area Indian Health Service, Reno District Office, continued the next steps for the project to address OSHA Hazard Communication Deficiencies within the District's Establishment Type 22.1, Head Start, and Type 23.1, Child Care Center (non-residential) facilities.

OSHA identified the top ten most frequently cited serious violations in General Industry during FY22, with Hazard Communication (written program, information and training, and Safety Data Sheets readily available) ranking number two of the top ten (2,639 total violations).

Methods

Six Steps to an Effective Hazard Communication Program		Indian Health Service Activities Conducted
1. Learn the Standard/Identify Responsible Staff	• Obtain a copy of OSHA's Hazard Communication Standard. • Become familiar with its provisions. • Make sure that someone has primary responsibility for coordinating implementation. • Identify staff for particular activities (e.g., training).	• Initial training and explanation of Hazard Communication Standard provided on-site • Deficiencies identified and report provided to each facility • Chemical Inventory conducted of chemicals on site
2. Prepare and Implement a Written Hazard Communication Program	• Prepare a written plan to indicate how hazard communication will be addressed in your facility. • Prepare a list or inventory of all hazardous chemicals in the workplace.	• Fillable Policy template in compliance with OSHA standard provided to each program
3. Ensure Containers are Labeled	• Keep labels on shipped containers. • Label workplace containers where required.	• Sample chemical labels provided to facility • Chemical container deficiencies assessed at time of survey
4. Maintain Safety Data Sheets	• Maintain safety data sheets for each hazardous chemical in the workplace. • Ensure that safety data sheets are readily accessible to employees.	• Manufacturer Safety Data Sheets (SDS) of chemicals in use were provided to the facility director • Chemical inventory database
5. Inform and Train Employees	• Train employees on the hazardous chemicals in their work area before initial assignment, and when new hazards are introduced. • Include the requirements of the standard, hazards of chemicals, appropriate protective measures, and where and how to obtain additional information.	• Training link was provided to meet compliance with the Hazard Communication Standard • IHS Office available during training to answer questions and meet access requirements of training
6. Evaluate and Reassess Your Program	• Review your hazard communication program periodically to make sure that it is still working and meeting its objectives. • Revise your program as appropriate to address changed conditions in the workplace (e.g., new chemicals, new hazards, etc.).	• Program will be assessed during follow-up/routine environmental health surveys within 6/12 months and as needed or upon request • Available to provide ongoing technical assistance and support

Results

23 child care facilities with Hazard Communication related deficiencies achieved a 100% corrective action rate to comply with OSHA Hazard Communication Standard

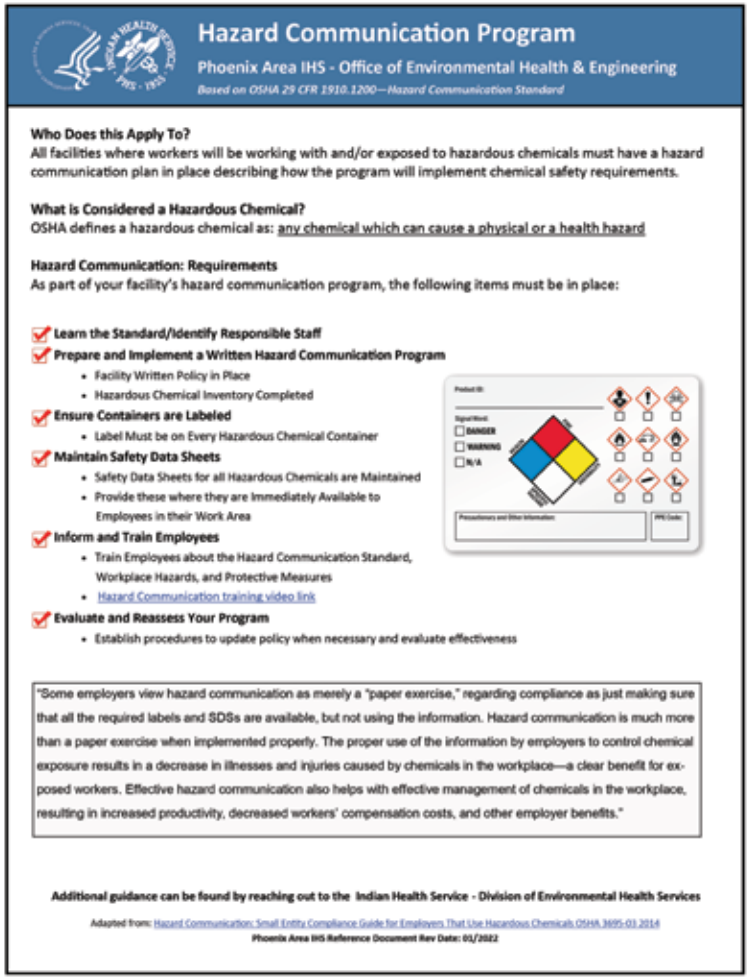
Project accomplishments

- Development of Hazard Communication Program Policy (fillable template)
- Hazard Communication Program FAQ Overview and reference document
- Chemical inventory and labeling compliance
- Chemical safety training for 48 Participants

Conclusion/Recommendations

Each program will be assessed during follow-up/routine environmental health surveys within 6/12 months, and as needed or upon request. Based on the outcomes achieved for Hazard Communication, the Reno District plans to expand the project to address deficiencies involving the OSHA Bloodborne Pathogen Standard across Establishment Type 22.1, Head Start, Type 23.1, Child Care Center, and Type 49, Gaming Facilities.

Hazard Communication Program Reference Document



Hazard Communication Program

Phoenix Area IHS - Office of Environmental Health & Engineering

Based on OSHA 29 CFR 1910.1200—Hazard Communication Standard

Who Does this Apply To?
All facilities where workers will be working with and/or exposed to hazardous chemicals must have a hazard communication plan in place describing how the program will implement chemical safety requirements.

What is Considered a Hazardous Chemical?
OSHA defines a hazardous chemical as: any chemical which can cause a physical or a health hazard

Hazard Communication: Requirements
As part of your facility's hazard communication program, the following items must be in place:

- **Learn the Standard/Identify Responsible Staff**
- **Prepare and Implement a Written Hazard Communication Program**
  - Facility Written Policy in Place
  - Hazardous Chemical Inventory Completed
- **Ensure Containers are Labeled**
  - Label Must be on Every Hazardous Chemical Container
- **Maintain Safety Data Sheets**
  - Safety Data Sheets for all Hazardous Chemicals are Maintained
  - Provide these where they are Immediately Available to Employees in their Work Area
- **Inform and Train Employees**
  - Train Employees about the Hazard Communication Standard, Workplace Hazards, and Protective Measures
  - Hazard Communication training video link
- **Evaluate and Reassess Your Program**
  - Establish procedures to update policy when necessary and evaluate effectiveness

"Some employers view hazard communication as merely a "paper exercise," regarding compliance as just making sure that all the required labels and SDSs are available, but not using the information. Hazard communication is much more than a paper exercise when implemented properly. The proper use of the information by employers to control chemical exposure results in a decrease in illnesses and injuries caused by chemicals in the workplace—a clear benefit for exposed workers. Effective hazard communication also helps with effective management of chemicals in the workplace, resulting in increased productivity, decreased workers' compensation costs, and other employer benefits."

Additional guidance can be found by reaching out to the Indian Health Service - Division of Environmental Health Services

Adapted from: Hazard Communication: Small Entity Compliance Guide for Employers That Use Hazardous Chemicals OSHA 3695-03 2014

Phoenix Area IHS Reference Document Rev Date: 01/2022

Tribal Injury Prevention Cooperative Agreement Program (TIPCAP)

Andrea Tsatoke, Molly Madson
Headquarters

Introduction

- Injuries are the leading cause of death among American Indian Alaska Natives (AIAN) from ages 1-54[1]
- TIPCAP is a 5-year cooperative agreement program that awards funding to tribes or tribal/urban organizations to implement focused, community-based injury prevention programs and projects using evidence-based strategies
- Since 1997, the Indian Health Service (IHS) Injury Prevention Program has funded 111 grantees and provided $44 million in funding to address injuries

Methods

- TIPCAP awardees utilize evidence-based and innovative strategies in collaboration with key partners to address injuries
- TIPCAP grantees receive technical assistance from the Centers for AIAN Health, Colorado School of Public Health
- IHS Injury Prevention Specialists and Environmental Health Specialists serve as Project Officers to the TIPCAP sites

TIPCAP awardees are categorized in two programs:

- Part I
  - » Implement and develop injury prevention program
  - » $125,000/year
- Part II
  - » Implement and develop injury prevention projects
  - » $32,000/year

Results

- For the 2021-2025 TIPCAP cycle, 27 tribes were awarded across 11 IHS areas and provides $2.4 million in funding/year
- Priority focus areas include motor vehicle-related injury prevention and unintentional fall prevention for elders
- Three TIPCAP programs focus on traumatic brain injury prevention, emphasizing helmet usage
- Additional focus areas include suicide prevention and opioid poisoning prevention
- TIPCAP demonstrated sustainability by addressing injuries during pandemic and adapting to challenges (vacancies, competing priorities, virtual practices, etc.)

Next Steps

- Continue to tailor evidence-based practices and innovative strategies to meet tribal community needs
- Promote awareness of how to apply for TIPCAP program
- Continue to evaluate the TIPCAP program

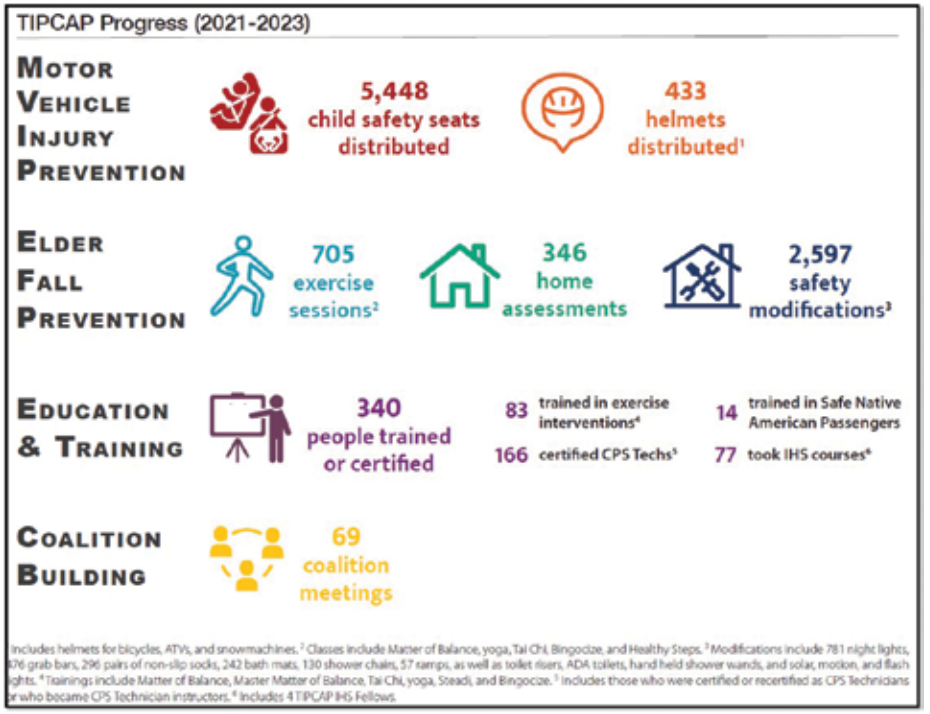
Reference

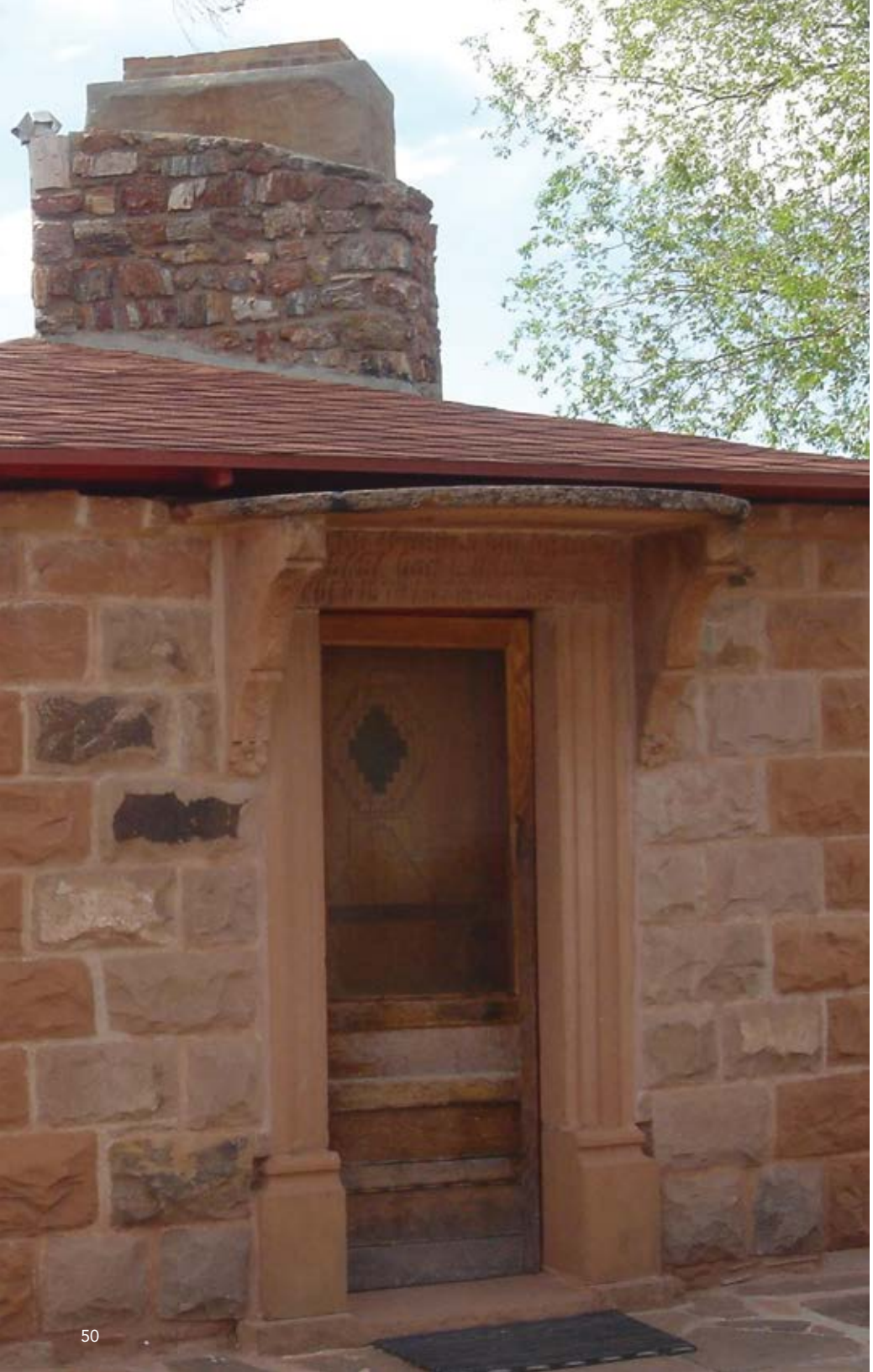
[1]CDC: WISQARS

Acknowledgement

We offer our appreciation and thanks to participating TIPCAP sites, Project Officers and UCD monitoring contractors

SCAN ME!





Healthy Homes

EH issues associated with housing on tribal lands present an ever- increasing set of complex challenges to be addressed. A few examples of EH related issues of concern are lead exposure, asbestos exposure, mold, disease vectors, lack of potable water, radon gas, solid and liquid waste disposal, injuries (e.g., fires, electrocution, and slips/ trips/falls), chronic chemical exposures, and asthma triggers.

Many programs focus on capacity building and education related to reducing asthma attack rates, mold and moisture problems, chemical exposure, and other events that are documented through health surveillance systems and through a home inspection program. Home inspections identify threats to the health of occupants and the DEHS staff focus on identifying and eliminating related risk factors. A project with an emphasis on healthy homes conducted in 2023 can be found on the following pages.

Oklahoma City Area Medication Lockbox Harm Reduction Service

David Bales
Oklahoma City Area

Introduction

In response to the current opioid epidemic, beginning in 2022 the Oklahoma City Area (OCA) Injury Prevention Program partnered with the OCA IHS Pharmacy Departments to offer Medication Lockboxes Harm Reduction (MLHR) services throughout the Area. The medication lockboxes are designed to safeguard opioid prescription medications in the home environment. The medication lockboxes are provided by the OCA IHS Office of Environmental Health Injury Prevention Program and are distributed through the OCA IHS Pharmacy Department. Patients are educated on the disposal options and safe medication storage when receiving the lockbox.

Methods

- Leadership support and funding for the initial cost of the medication lockboxes must first be obtained
- Conducted key informant interviews with pharmacy staff to identify a target population at highest risk for prescription medication poisoning
- 251 lockboxes were purchased for distribution in seven healthcare facilities in the OCA
- Cost was around $25K ($100 per lockbox) for the medication lockboxes and batteries
- Educational materials were developed to utilize during lockbox distribution
- HHS approval was obtained to survey patients following medication lockbox distribution (1st survey), 30 days (2nd survey) and 60 days (3rd survey)
- Survey was administered via Survey Monkey utilizing QR codes
- Pharmacy staff reminded patients to complete the 30 and 60 day surveys during medication pickup and via phone

Results

The MLHR service was implemented in seven OCA IHS Healthcare facilities in 2022 and continues as a service. The MLHR service target population developed from the key informant interviews are the following:

1. Patients that receive over 50 morphine milliequivalents (at higher risk for overdose) and are given a naloxone; or
2. Patients on an opioid and benzo; or
3. Naloxone dispensed in past year; or
4. At the Pharmacy discretion example reported medications stolen.

To date 58 medication lockboxes have been distributed through this service and 39 patients completed the 1st survey, 17 patients completed the 2nd survey and 14 patients completed the 3rd survey.

Below are the results from the surveys.

- 1st survey 97.44% reported that they will continue using the lockbox while 100% reported that they will continue using the lockbox on the 2nd and 3rd surveys.
- One patient had prescription medication stolen recently on the 1st survey while no patients reported medications stolen on the 2nd and 3rd survey.
- One patient lost or misplaced prescription medication recently on the 1st survey while no patients reported medications stolen on the 2nd and 3rd survey.
- On the 1st survey 80% reported they store medications unlocked while 13% reported they store medication unlocked on 2nd and 3rd surveys.
- On the 1st survey 5% reported they store medications in lockbox while 65% reported they store medication in a lockbox on 2nd and 3rd surveys.

Conclusions

The results show that the MLHR service targets high-risk patients and has helped ensure medications provided are secure. Implementing this service through the pharmacy has allowed for a targeted approach allowing a service to continue with a relatively small cost.

Safe Firearm Storage Practices Utilizing Tribal Community Engagement

Martin Stephens, Kayla Davis, George Chung, Justice Lambon, Devin Temple, Zachary Hargis, Nathania Yardley, Andrea Tsatoke, Robert Morones
Phoenix Area

Introduction

- The firearm homicide rate in the U.S, increased ~ 35% in 2019 to 2020. This resulted in a 25-year high national homicide rate: 6.1 per 100,000
- For American Indian/Alaska Native (AI/AN) persons, a troubling trend showed a 42% increase in suicide by firearm incidents during this time[1]
- The AI/AN population were 3.5 times as likely to die by firearm homicide compared to Caucasians[2]
- Firearm storage cabinets have been identified as an effective intervention to safely store firearms to prevent firearm injuries and deaths[3]
- The purpose of this project was to determine if making firearm storage cabinets available in tribal communities would reduce risks of unintended firearm access in the home

Methods

The Phoenix Area injury prevention program established pilot projects in two rural Arizona tribal communities to make firearm storage cabinets available for in-home use.

- Eligibility criteria: Age 21+; own 1 or more firearm; tribal member homeowner or tenant
- Project participants were selected through a digital sign-up process
- A community participative approach was utilized for the project design
- A project team distributed metal storage cabinets with an 8-gun capacity
- Evaluation included baseline interviews and 60-day follow-up interviews to understand any changes in firearm storage practices in participating homes
- Data was collected from the project participants and analyzed using Excel

Results

This project resulted in a change in firearm storage practices. At baseline, the percentage of firearms secured in the participant homes was 45%, which after placement of storage cabinets showed an increase to 83%.

Project Highlights

- 78 cabinets distributed, capable of securing up to 624 firearms securely
- Bedrooms were the preferred location for storage of firearms
- 77% of participants said firearms were present for home defense purposes
- 69% of residents that received cabinet reported at least one minor (aged 0-17 years) residing in the household
- 78% of project participants have received formal firearm education

Discussion/Conclusion

- Using a community participative approach increased the level of stakeholder buy-in and involvement
- Partnering with a local point of contact allowed for more effective communication with the target population
- Lessons learned from this project will be incorporated into the next pilot phase in FY24

Acknowledgement

We wish to acknowledge the partnerships and contributions from: White Mountain Apache Tribe Fire Department, and Game & Fish department; the Hualapai Tribe Emergency Operations Department, Game & Fish Department; and the IHS Phoenix Area Integrated Behavioral Health Program.

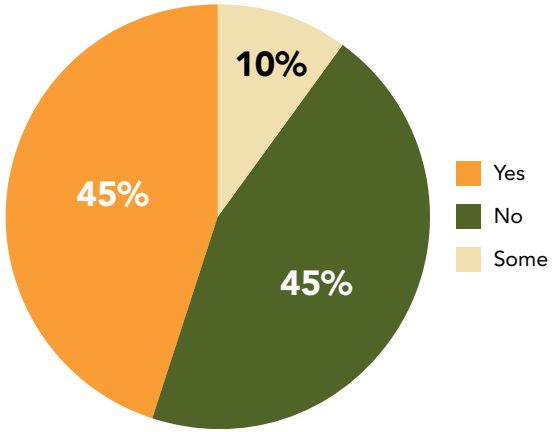
References

[1] Kegler SR, Simon TR, Zwald ML, et al. *Vital Signs*: Changes in Firearm Homicide and Suicide Rates — United States, 2019–2020. MMWR Morb Mortal Wkly Rep 2022;71:656–663. DOI: http://dx.doi.org/10.15585/mmwr.mm7119e1

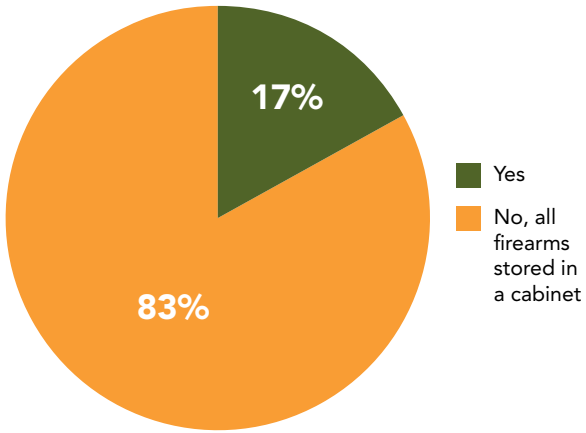
[2] Davis, A., Kim, R., & Crifasi, C. K. (2023). A Year in Review: 2021 Gun Deaths in the U.S. Johns Hopkins Center for Gun Violence Solutions. Johns Hopkins Bloomberg School of Public Health.

[3] Shenassa ED, Rogers ML, Spalding KL, Roberts MB. Safer storage of firearms at home and risk of suicide: a study of protective factors in a nationally representative sample. J Epidemiol Community Health. 2004 Oct;58(10):841-8. doi: 10.1136/jech.2003.017343. PMID: 15365110; PMCID: PMC1763337.

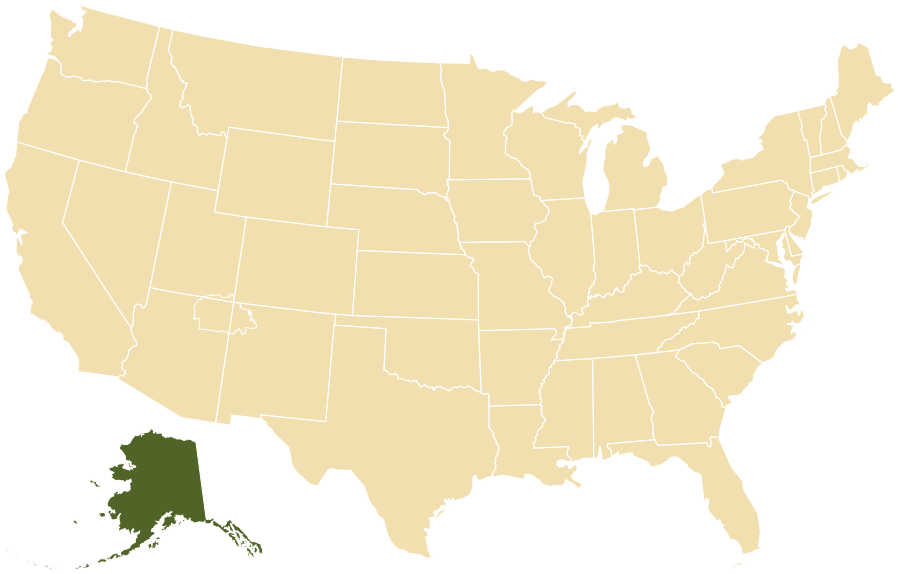
Are your firearms locked/secured?
Baseline



Any firearms not stored in of your cabinet?
60 Day Follow-up



Area DEHS Programs



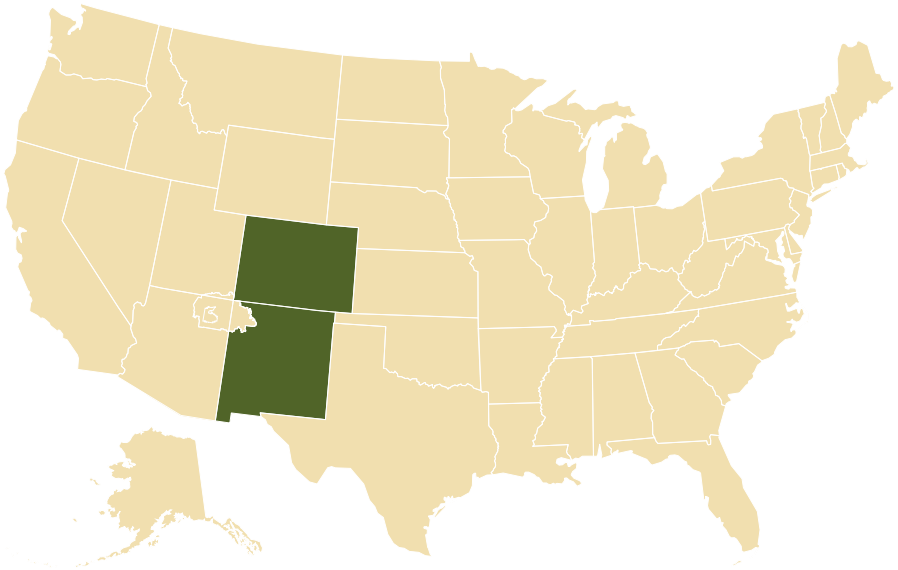
Alaska

EH programs in the Alaska Area are all tribally managed under the authority of the Indian Self-Determination and Education Assistance Act (Public Law 93-638), as amended. Seven regionally-based EH programs serve a specific geographical area. These organizations include the South East Alaska Regional Health Consortium (Sitka), the Bristol Bay Area Health Corporation (Dillingham), the Yukon- Kuskokwim Health Corporation (Bethel), the Norton Sound Health Corporation (Nome), the Maniilaq Association (Kotzebue), the Tanana Chiefs Conference (Fairbanks), and the Alaska Native Tribal Health Consortium (ANTHC, of Anchorage).

Typical services include assistance related to water, sewer, solid waste, air, and vector control activities. Other services include disease outbreak investigations, support for community-based clinics related to infection control and safety, and IP efforts. Additionally, several of the tribal EH programs operate State of Alaska certified drinking water laboratories that assist communities in ensuring the safety of their drinking water and ensuring compliance with state and federal regulations.

The regional EH programs, together with ANTHC, offer communities and tribes a comprehensive set of environmental health services that protect and enhance the wellbeing of AI/ANs.

Albuquerque



Website: https://www.ihs.gov/albuquerque/oehe/dehs/

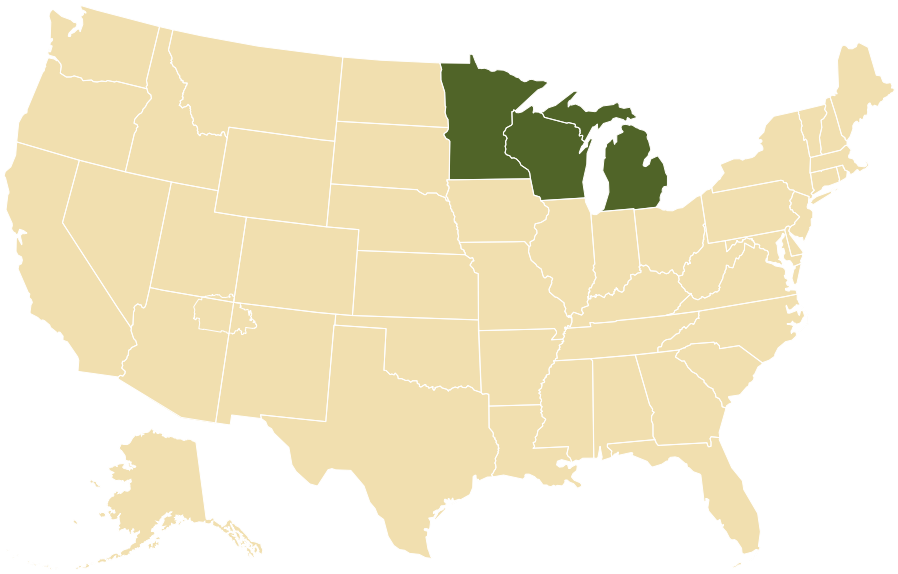
Number of tribes/pueblos: 25 total; all directly receive EHS services (note: multiple chapters counted under Navajo)

User population: 82,774 (FY22)

Staff: 17 (14 EH Generalists, 1 Injury Prevention Specialist, 2 Institutional EH Officer)

District/Field offices: Albuquerque District Office; Santa Fe District Office; Durango Field Office; Mescalero Field Office; Taos Field Office; Zuni Field Office

Accomplishment: Collaborated with Bureau of Indian Education Safety and Occupational Health Program to jointly conduct school surveys



Bemidji

Website: https://www.ihs.gov/bemidji/areaservices/oehe/dehs/

Number of tribes/pueblos: 34 tribes in total and 31 of them receive direct services from the BAIHS, DEHS

User population: 101,309 (FY22)

Staff: 12 (10 EH Generalists, 1 Injury Prevention Specialist, 1 Institutional EH Officer)

District/Field offices: Minnesota District Office; Rhinelander District Office; Duluth Field Office; Mount Pleasant Field Office

Accomplishment: 6 ServSafe certified instructors, evaluated our training methods and provided ServSafe certified food manager training to 361 workers; this is a driving force to our 96.3% compliance with food service operations having certified food safety managers

Billings

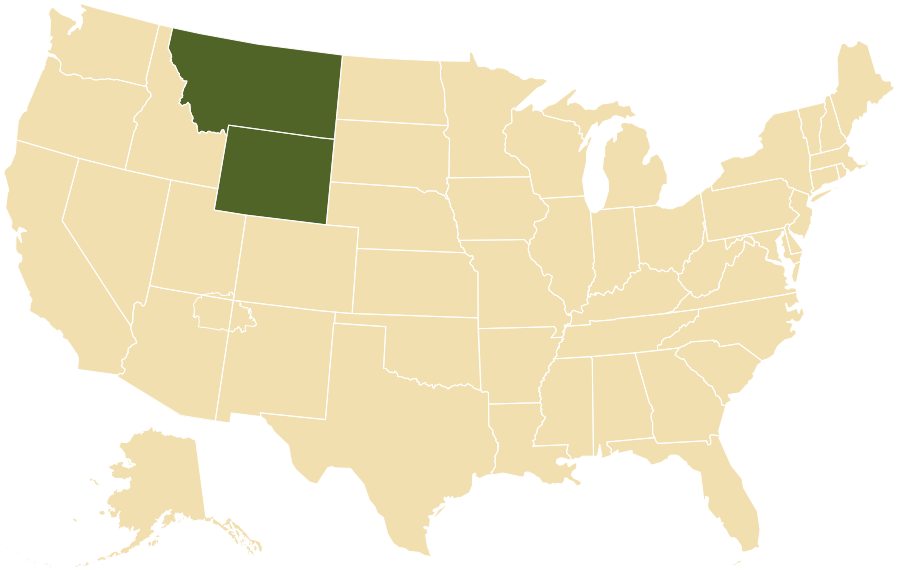
Number of tribes/pueblos: 14 total; 3 receive services directly from DEHS

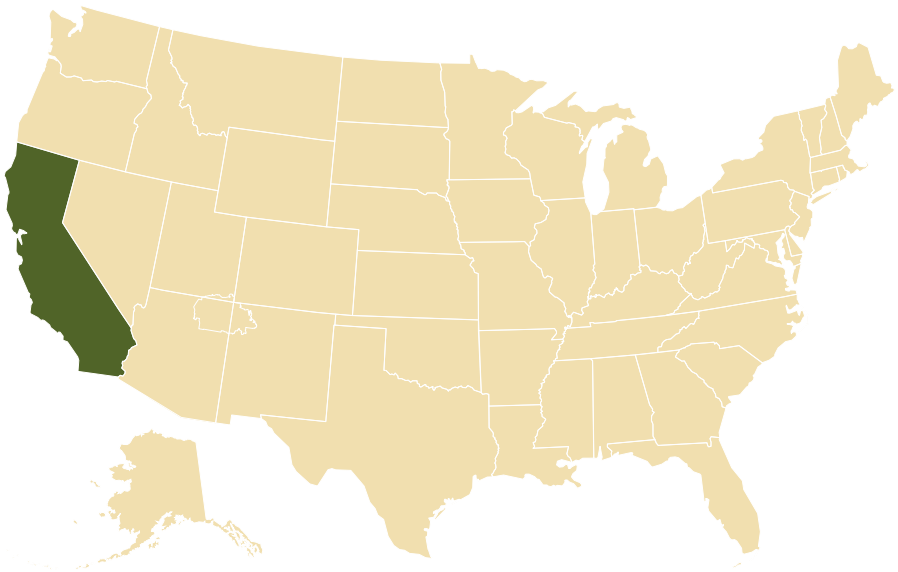
User population: 70,200 (FY22)

Staff: 16 (13 EH Generalists, 2 Injury Prevention Specialists, 1 Institutional EH Officer)

District/Field offices: Crow; Blackfeet; Eastern Shoshone

Accomplishment: Developed Billings Area IHS Lay Vaccinator Program





California

Website: https://www.ihs.gov/california/index.cfm/offices/oehe/dehs/

Number of tribes/pueblos: 96 tribes in total and 86 federally recognized tribes and 34 tribal health programs receive direct services from the CAIHS, DEHS

User population: 81,874 (FY22)

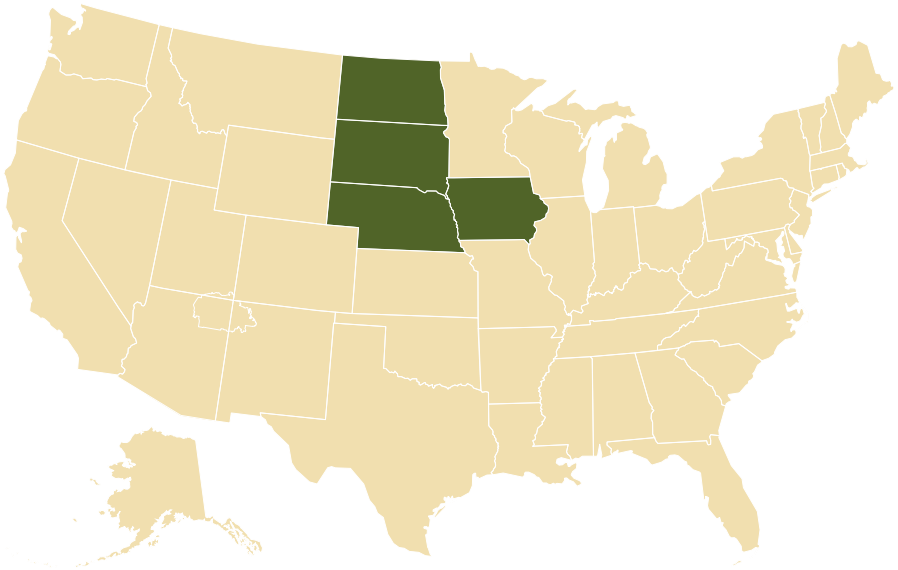
Staff: 7 (7 EH Generalists)

District/Field offices: Escondido District Office; Redding District Office; Sacramento District Office; Arcata Field Office; Clovis Field Office; Ukiah Field Office

Accomplishment: Developed a 5 year strategic plan for 2024-2028 using key tribal informant interviews to assess the environmental health needs within the California Area

- Vision of plan is to empower California tribes to adapt and respond to emerging environmental health needs and threats
- Goals of plan are to facilitate increased tribal resilience to the impacts of climate change, improve tribal water utility resilience to water outages and align our food protection program with national standards

Great Plains



Website: https://www.ihs.gov/greatplains/programs/officeofenvironmentalhealthandengineering/oeheenvironmentalhealthservices/

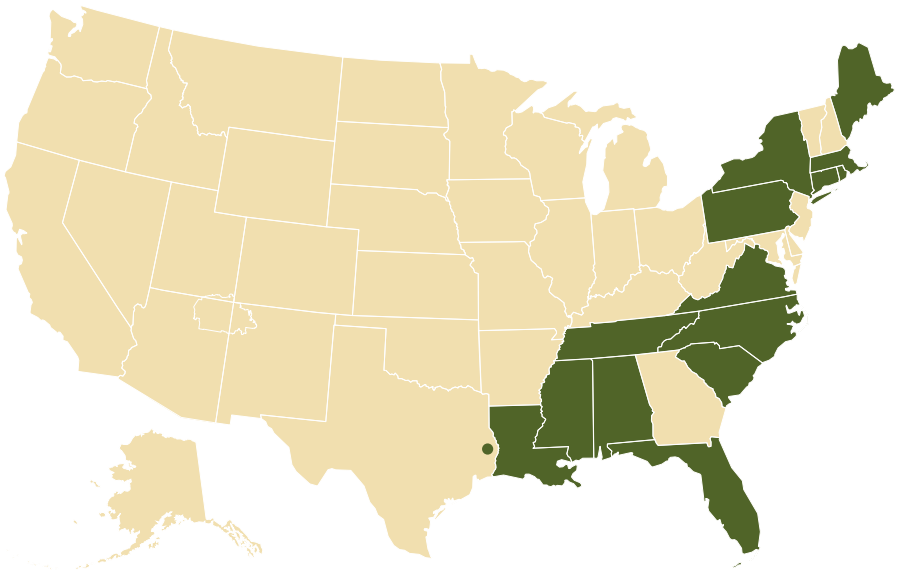
Number of tribes: 16; 10 receive services directly from DEHS

User population: 131,429 (FY22)

Staff: 18 (14 EH Generalists; 1 IP Specialists; 3 IEHOs)

District/Field Offices: Minot District Office, Pierre District Office, Sioux City District Office; Field Offices/Service Units: Dunseith, Sisseton, Rosebud, Pine Ridge

Accomplishment: Collaborated with the State of Iowa to provide food safety services at RAGBRAI



Nashville

Number of tribes: 36 total; 27 receive services directly from DEHS

User population: 59,661 (FY22)

Staff: 3 (2 EH Generalists; 1 IEHO)

Accomplishment: Re-started the development and funding of community level IP projects within Area

Navajo

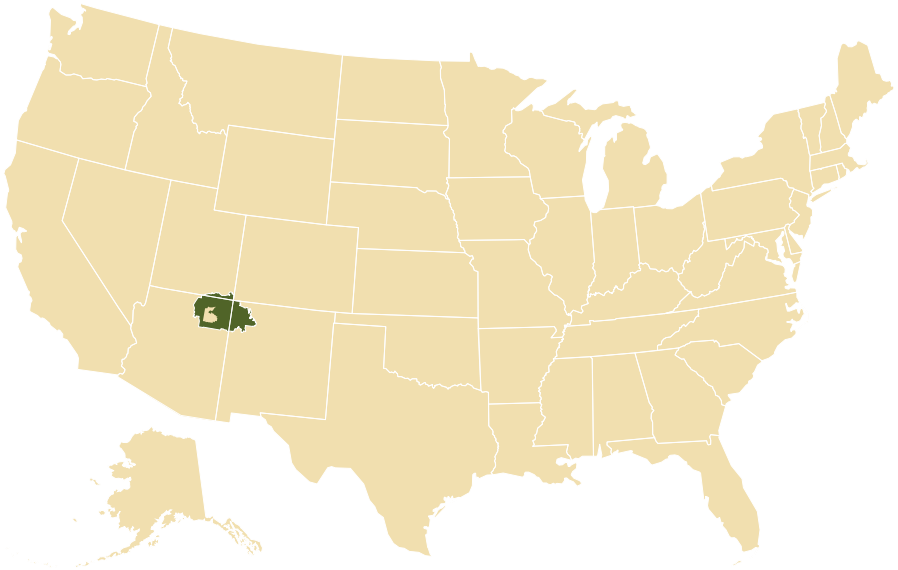
Number of tribes: 1

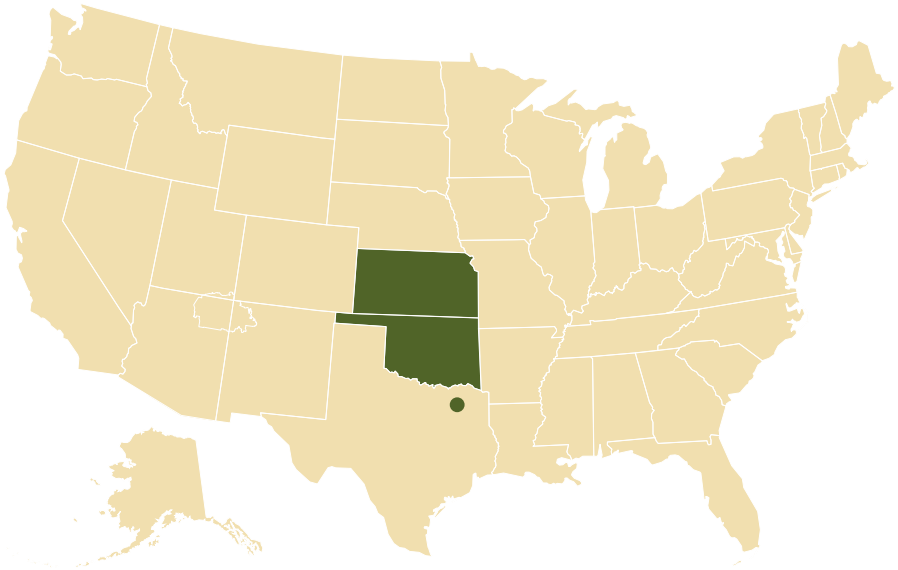
User population: 236,740 (FY22)

Staff: 27 (20 EH Generalists, 4 Injury Prevention Specialist, 3 Institutional EH Officer)

District/Field offices: Gallup District Office; Shiprock District Office; Fort Defiance Field Office; Kayenta Field Office; Many Farms Field Office

Accomplishment: 662 EH surveys completed, 18 environmental health-related trainings provided and four communicable disease investigations completed





Oklahoma City

Website: https://www.ihs.gov/oklahomacity/oehe/dehs/

Number of tribes: 43 total; 28 receive services directly from DEHS

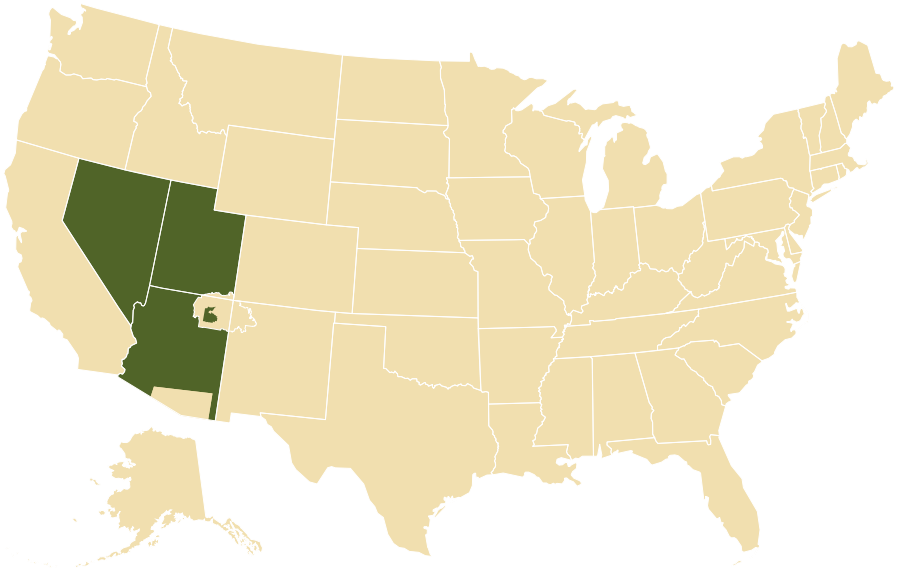
User population: 407,942 (FY22)

Staff: 9 (7 EH Generalists, 1 Injury Prevention Specialist, 1 Institutional EH Officer)

District/Field offices: Okmulgee District Office; Pawnee District Office; Clinton Field Office; Holton Field Office; Lawton Field Office; Shawnee Field Office

Accomplishment: All field staff have been FDA Standardized within this calendar year

Phoenix



Website: https://www.ihs.gov/phoenix/programsservices/enviromentalhealth/

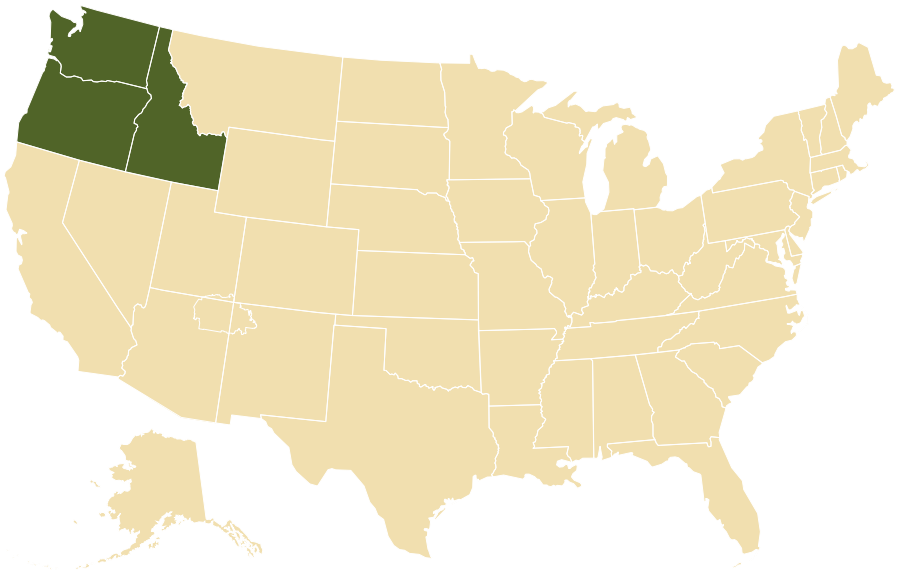
Number of tribes: 46 total; 44 receive services directly from DEHS

User population: 177,888 (FY22)

Staff: 29 (22 EH Generalists, 4 Injury Prevention Specialist, 2 Institutional EH Officers; 1 EMPOC)

District/Field offices: Eastern Arizona District Office; Reno District Office; Western Arizona District Office; San Carlos Field Office; Whiteriver Field Office; Hopi Field Office; Schurz Field Office; Owens Valley Field Office; Elko Field Office; Fort Duchesne Field Office; Phoenix Field Office; Fort Yuma Field Office; Colorado River Field Office

Accomplishment: Unified approach to vector control with tribal, federal, state and NGO partners.



Portland

Website: https://www.ihs.gov/Portland/dehs/#:~:text=The%20Division%20of%20Environmental%20Health,work%20of%20environmental%20health%20professionals

Number of tribes/pueblos: 43 total; 6 receive services directly from PAIHS, DEHS

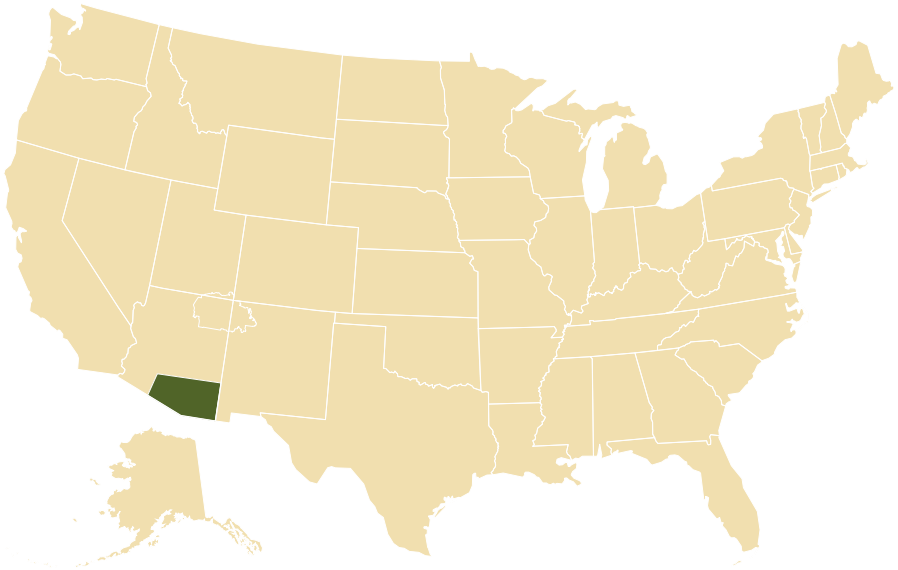
User population: 113,060 (FY22)

Staff: 2 (2 EH Generalists)

District/Field offices: Yakama Field Office

Accomplishment: Collaborator on DEHS Climate Change Workgroup

Tucson



Number of tribes: 2 total; 1 receives services directly from DEHS

User population: 27,003 (FY22)

Staff: 2 (2 EH Generalists)

District/Field offices: San Xavier, AZ

Accomplishment: Collaboration with county health department on disease surveillance in mosquitos

IHS Area DEHS Program Directory

Partnerships are an essential force multiplier that enhance the successful implementation of community-based environmental health services.

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The Division of Environmental Health Services

INDIAN HEALTH SERVICE • U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

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