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

The Environmental Health Services Program

–of the–

INDIAN HEALTH SERVICE
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Annual Report **2011**

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."

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Annual Report 2011

This Annual Report for Calendar Year 2011 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 writing to the following address:

INDIAN HEALTH SERVICE
Division of Environmental Health Services
801 Thompson Avenue, TMP 610
Rockville, MD 20852
Web site: http://www.dehs.ihs.gov

On the cover: This year's featured cover photo is the winner of the 2011 Division of Environmental Health Services (DEHS) photo contest. LCDR Travis Bowser teaches an extern the proper method to test a pool for residual chlorine.

Message from the Division Director

KELLY M. TAYLOR, M.S., R.E.H.S.
Division of Environmental Health Services

I am proud to present the Division of Environmental Health Services (DEHS) Annual Report for 2011. This report covers activities and projects conducted by Indian Health Service (IHS) and Tribal/Corporation environmental health partners throughout the nation. The intent of the report is two-fold: to capture historical program information so that it will not be lost to the ages and to highlight activities and accomplishments that address the five DEHS national program focus areas. All of our activities support the four IHS priorities.

Each IHS Area is encouraged to continue to identify and work on local priorities, using maximum stakeholder input, but when it comes to defining need and identifying roles and responsibilities nationally, we have agreed to focus on the following five areas: children's environment, safe drinking water, food safety, vectorborne and communicable diseases, and healthy homes. To allay any fears that the injury prevention and institutional environmental health specialty areas of our program were left out, I will point out that these specialty areas address most, if not all, of the five focus areas.

It has always been difficult to demonstrate the health impact of our activities when we prevent something from happening in the first place, but it is not impossible. Even though we may not be able to show that our activities directly improve morbidity and mortality rates, we can show that working with a tribe to pass a seatbelt law led to a reduced number of motor vehicle crash-related emergency department visits or that having a tribal food code led to fewer risk factor violations than not having one. Throughout this report, we tried to highlight Area activities that demonstrate our program's impact. In this time of enhanced accountability, it is critical that we all demonstrate the effectiveness and impact of our actions.

Nationally, we accomplished many of the objectives planned for this year. DEHS established a baseline for "out of compliance" food safety risk factors. Each Area identified a target population that they would monitor and calculated a baseline percent. The resulting national baseline was 4.6% out of compliance food safety risk factors. We established a national seatbelt use percentage for communities identified by Tribal Injury Prevention Cooperative Agreement Program (TIPCAP) sites. Each TIPCAP site that identified improving seatbelt use as an objective reported their identified communities' seatbelt use percentages which were used to develop the national seatbelt baseline of 57%. In 2012, the DEHS and TIPCAP staff will implement appropriate interventions to attempt to improve the local target populations' percentages and ultimately the national baseline percentages. We completed the remaining two DEHS Vision Elements (a draft revision of Chapter 11 of the Indian Health Manual and a set of tools to increase our program's visibility, understanding, and value) and started planning how to implement them. We provided input into the congressional report that the Indian Health Care Improvement Act required IHS to develop. This document was intended to demonstrate to Congress how IHS has improved disease and injury rates through the use of successful strategies. We continued to enhance tribal injury prevention programs by supporting TIPCAP, Ride Safe, and Sleep Safe. Forty TIPCAP sites were approved for continued funding; however, the purchase of safety products for Ride Safe and Sleep Safe was delayed into the second year of the 2011-2012 funding cycle. Eventually, 29 Ride Safe and 25 Sleep Safe sites received child safety seats and smoke alarms through the Oklahoma City Area National Supply Service Center. Although DEHS continued to host Canadian Environmental Health Officers (EHO) for the Staff Exchange, we were unable to send any IHS EHO to Canada. The new DEHS data system's implementation and training were delayed until the following year.

I hope you enjoy reading about IHS DEHS projects and activities across the country. I welcome your input into how we can better serve the American Indian and Alaska Native people and demonstrate our effectiveness.

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The Environmental Health Services Program Annual Report 2011

Profile of the DEHS Program

PROGRAM MISSION

The mission of the Division of Environmental Health Services (DEHS) is "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." In support of this mission, the DEHS Program provides a range of services to the American Indian and Alaska Native (AI/AN) communities.

PROGRAM HISTORY

The roots of the DEHS Program can be traced back to 1912, when the U.S. Department of the Interior's Office of Indian Affairs Commissioner Burke issued a circular directing agency Physicians to serve as Health Officers for their reservation. Over the next several decades, this responsibility for community surveys shifted toward the sanitary engineering staff. These surveys came to include a wide range of facilities, from water systems to community buildings to dairy plants.

By the time of the Transfer Act (Public Law 83-568), which moved the responsibilities for AI/AN health care from the Bureau of Indian Affairs (BIA) to the Indian Health Service (IHS), most of the components of the current Environmental Health Services Program were in place with agency policies for food handler training, radiological health, facility inspections, and water fluoridation. The emphasis was on establishing, expanding, and resolving basic sanitation services. The Sanitarian Aides were the workforce in the field, with a few supervisory Sanitarians at Area Offices. In 1962, the first headquarters Institutional Environmental Health Officer was hired, providing advice and technical guidance on all community-based institutions.

In 1963, a joint conference of BIA and Division of Indian Health (renamed IHS in 1969) leadership discussed collaborative efforts to combat the community accident mortality problem among Indians. An Accident Prevention Program was established within Environmental Health Services while calls for expanded funding and authority went to Congress. In 1969, Congress provided funding and positions for the Accident Prevention Program in the Health Education Program. The Accident Prevention Program continued as a collaborative effort with Health Education until 1979, when IHS Director Emery Johnson formally transferred responsibility to Environmental Health Services and the name changed to Community Injury Control, and later to Community Injury Prevention.

PROGRAM STRUCTURE

True to its historical beginnings, the DEHS Program 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. Area Office staff typically consist of the DEHS Division Director and one or two professional (Injury Prevention Program Manager and/or Institutional Environmental Health Program Manager) staff. District Environmental Health Officers and their support staff are often located away from the Area Office and closer to the tribal communities.

DEHS Headquarters (HQ), located in the IHS HQ office in Rockville, Maryland, consists of a Director, Assistant Director, Institutional Environmental Health Program Manager, and Injury Prevention Program Manager. In addition, an Environmental Health Data Systems Manager supports the information systems used by the Program on a national basis.

In 2011, the DEHS Program consisted of a total of 285 staff, including the 6 HQ staff positions.

PROGRAM RESOURCES

The current budget of the DEHS Program is approximately $25.1 million; this funding is derived from three primary sources: congressional allocation; the IHS Director's Initiatives; and injury prevention budget enhancements (see Table 1). DEHS funds support a wide variety of activities, including injury prevention, institutional environmental health, safety management and industrial hygiene, food safety, vectorborne disease control, and technical assistance to community Water and Waste Disposal Facility Operators.

As presented in Table 1, on the next page, the DEHS Program budget is derived from the overall Environmental Health Support Account (EHSA) that supports the activities of both the DEHS as well as Division of Sanitation Facility Construction (DSFC) Programs. For 2011, and based on the workload-based Resource Requirement Methodology (RRM), the DEHS share of the EHSA budget was approximately 32%.

Table 1: DEHS Program Funding Sources

Fiscal Year	Total EHSA Budget	DEHS RRM Share	DEHS Budget*				IHS Director's Initiative	Injury Prevention Budget Enhancements	Total DEHS Budget
				COSTEP**	Injury Prevention**	Residency**			
1998	$42,159,000	33.80%	$14,249,742	$81,000	$116,000	$90,000	$304,000	$0	$14,840,742
1999	$44,244,000	33.80%	$14,954,472	$206,000	$174,100	$120,000	$304,000	$0	$15,758,572
2000	$49,162,000	33.20%	$16,321,784	$208,000	$175,000	$67,600	$304,000	$1,475,000	$18,551,384
2001	$50,997,000	34.20%	$17,440,974	$184,000	$69,000	$63,100	***	$1,779,000	$19,536,074
2002	$52,856,000	34.93%	$18,460,797	$224,000	$111,000	$100,000	***	$1,779,000	$20,674,797
2003	$54,437,000	36.62%	$19,937,064	$194,100	$88,000	$100,000	***	$1,779,000	$22,098,164
2004	$55,888,650	33.63%	$18,794,176	$240,000	$118,700	$100,000	***	$1,779,000	$21,031,876
2005	$56,328,611	32.80%	$18,475,968	$232,000	$74,000	$100,000	***	$1,779,000	$20,660,968
2006	$57,447,796	34.03%	$19,547,711	$208,000	$67,500	$100,000	***	$1,779,000	$21,702,211
2007	$63,235,458	35.68%	$22,564,290	$232,000	$98,000	$100,000	***	$2,779,000	$25,773,290
2008	$64,576,052	37.65%	$24,313,637	$216,000	$61,000	$100,000	***	$2,779,000	$27,469,637
2009	$67,022,000	38.97%	$26,117,871	$228,500	$66,782	$100,000	***	$2,779,000	$29,292,153
2010	$69,196,000	35.74%	$24,730,653	$176,000	$0	$100,000	***	$2,779,000	$27,785,653
2011	$69,057,608	32.00%	$22,098,435	$144,000	$84,000	$0****	***	$2,771,942	$25,098,377

COSTEP = Commissioned Officer Student Training Extern Program.
*Represents an approximation based on initial DEHS and DSFC RRM calculations.
**Office of Environmental Health and Engineering funds provided to DEHS.
***IHS Director's Initiatives; $304,000 was added to Injury Prevention Budget Enhancements (column to the right) starting in 2001.
****There were no Institutional Residents selected for Calendar Year (CY) 2011; therefore, no money was allocated.

Figure 1, below, depicts a historical comparison of the workload-based RRM versus the distribution of Program funds from 2001 to 2011.

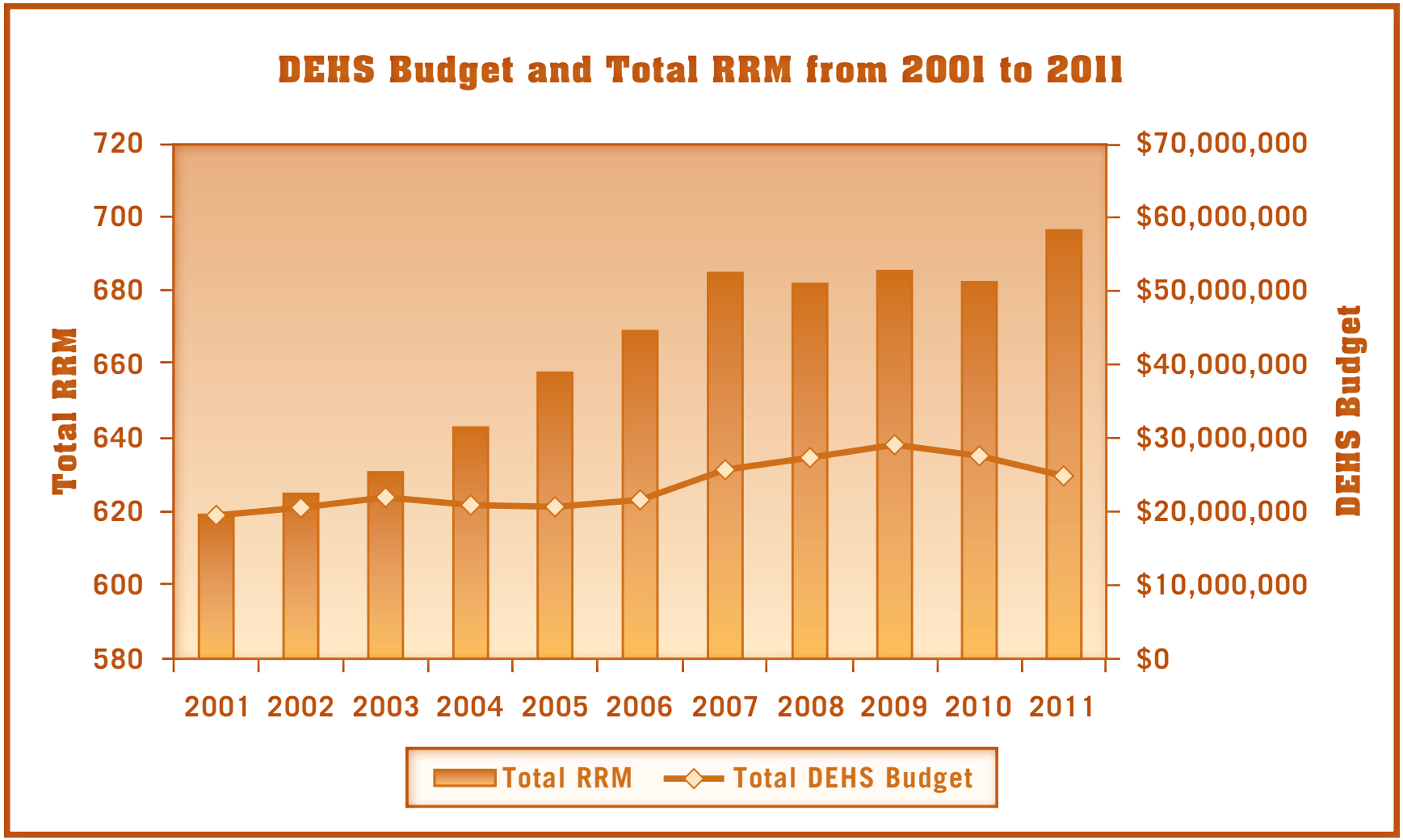


Figure 1: RRM (workload) vs. actual DEHS funding from 2001 to 2011

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 2: LNF for 2011

LNF 2011						
Area	# Tribal & IHS Staff*	RRM	%LNF	Federal Staff	Tribal Staff	Total
Aberdeen	31	58.2	53.3%	15	16	31
Alaska	36	88.0	40.9%	0	36	36
Albuquerque	19	37.0	51.4%	15	4	19
Bemidji	26	50.7	51.3%	10	16	26
Billings	15	33.4	45.0%	4	11	15
California	11	49.1	22.4%	5	6	11
Nashville	22	45.5	48.4%	2	20	22
Navajo	45	111.3	40.4%	32	13	45
Oklahoma	25	92.3	27.1%	10	15	25
Phoenix	31	68.6	45.2%	21	10	31
Portland	14	49.6	28.2%	9	5	14
Tucson	4	12.5	32.0%	3	1	4
Total	279	696.0**	40.1%	126	153	279

*Includes tribal staff hired with IHS Cooperative Agreement funds.
**This total is due to rounding.
Note: Staffing numbers reflect calendar year data (CY 2011), and RRM numbers reflect data year data (FY 2011).

As Table 2 shows, the DEHS Program strives to accomplish its tasks at a funding level of 40.1% of the estimated actual need. In order to maximize the utilization of available resources, the DEHS has established interagency agreements with the following federal agencies:

- Centers for Disease Control and Prevention;
- National Highway Traffic Safety Administration;
- Uniformed Services University of the Health Sciences;
- U.S. Fire Administration; and
- Consumer Product Safety Commission.

EDUCATION AND RECOGNITION

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 over 520 training sessions during 2011 on a variety of topics. The Environmental Health Support Center in Albuquerque provided environmental health program management, injury prevention, topic-specific environmental health, and institutional environmental health courses for a total of 23 classes.

Successful delivery of environmental health services to tribal communities rests on the foundation of a competent and motivated workforce. Figure 2 shows the numbers of student externs hired for the past 20 years. In 1994, a mandated reduction in Full-Time Equivalent staff resulted in a moratorium being placed on the recruitment of summer externs. In 1994, there were no externs hired. However, the program began to rebound in Fiscal Year (FY) 1996 and by FY 1999 was back to pre-1994 levels. During 2011, the DEHS supported 22 externs.

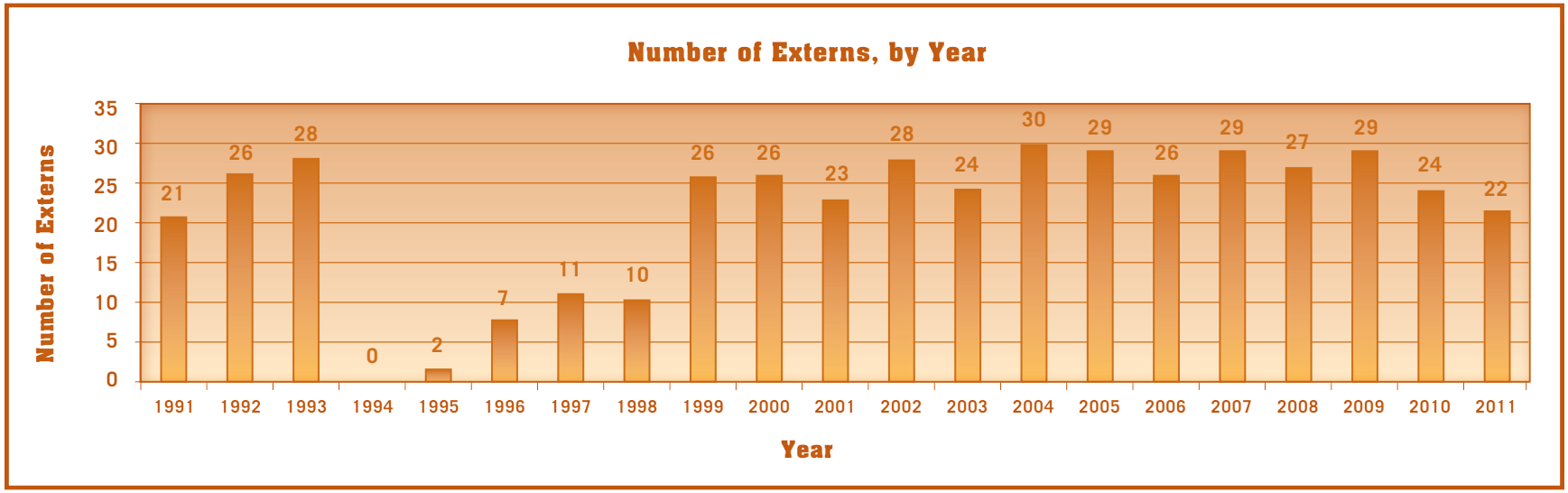


Figure 2: Number of college students participating in the DEHS extern program, by year

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 23 DEHS staff funded by IHS for college courses in 2011. Of the 23, 19 were federal employees and 4 were tribal employees. Staff in 7 of the 12 Areas received long-term training support.

Another program that builds capacity within IHS and tribes is the Injury Prevention Fellowship Program. The IHS Injury Prevention Fellowship Program is a 12-month advanced learning experience for individuals who want to address the single biggest killer of young American Indians and Alaska Natives – injuries.

Building on the IHS Injury Prevention Program short courses – and the prior experiences of the participants – the Fellowship offers advanced training in community interventions, coalition building, injury epidemiology, program evaluation, presentation skills, and field work. Fellows apply this training by working on individual projects involving data collection and/or program implementation and evaluation.

There are two Fellowship tracks, Program Development and Epidemiology. Although the two tracks have a similar structure, their emphasis, content, and prerequisites differ.

What do participants gain from the Fellowship?

- Enhanced skills in community injury prevention:
  - Designing a project,
  - Promoting community involvement,
  - Collecting and analyzing data, and
  - Conducting oral and written presentations;
- A knowledge of "best practices" for prevention of intentional and unintentional injuries;
- Individualized learning experiences (e.g., using Global Positioning System [GPS] devices);
- College credits from the University of Michigan (Epidemiology Fellowship); and
- Completion of a project that will help reduce injuries in their community.

There have been 271 graduates from the Fellowship since 1987. A list of the graduates by year can be found in Table 3, below.

Table 3: List of Injury Prevention Fellowship Program Graduates, by Year

1987	Ray Van Ostran William Bouwens, Jr. Ronald Perkins Steve McLemore Byron P. Bailey Edwin J. Fluette Jacqueline E. Moore Ralph Fulgham Larry Dauphinais Jack L. Christy	1988	John R. Weaver Helen A. Hayes Christine M. Jackson Robert S. Newsad David M. Mosier Gary A. Schuettpelz Jerry L. Lee Mark A. Kelty David C. Short B. Kevin Molloy Nancy M. Bill Gail G. Buonviri Elaine R. Bender Alan J. Dellapenna Jon S. Peabody Brian Cagle Douglas R. Akin	1989	Melvin Clifford Jeffrey J. Smith Sherron K. Smyth Eusibeo Toya Lois Jean Bressette Edward “Ted” Moran Glenn Frew Jimmie V. Stewart David C. Martin Woody K. Begay Fred E. Wiseman Richard A. Sullivan Harold Cully Candice N. Bell Michael Rathsam Darrel N. Whitman L.J. David Wallace, III	1990	Carol L. Rollins Malcolm B. Bowekaty John W. Leith Russell L. Savage Bernadette V. Hudnell Brenda J. Demery Dwayne Reed Kevin D. Meeks Vivian Echavarria DeAnne Pete Hardy John P. Leffel Lisa Lincoln Gina L. Locklear David H. McMahon Vanette R. Chase
1991	Kelly M. Taylor Evelyne Tunley Vurlene Notsinneh David Robbins Geoffrey G. Langer Craig A. Shepherd Debbie Burkeybile Keith Varvel Linda Thompson Kathi Gurule Gary J. Gefroh Jan Person Kiyomi Bird Steven G. Inserra Meda Nix Mildred Blackmon R. Cruz Begay	1992	Michael M. Welch Daniel C. Strausbaugh Virginia Begay Christopher Krogh Jodee Dennison Deanne M. Boisvert Louise B. Wedlock Dale M. Bates Susan McCracken Charles Stewart Watson Margaret M. Simons Joe Maloney Duane Kilgus Theresa Botruff	1993	Alta Bruce Matthew J. Powers Roxanne L. Ellingson Wendy Fanaselle Ward Jones Darla Tillman Shawn F. Sorenson Mark Jackson Mark H. Mattson John D. Smart Cynthia LaCounte Paul T. Young	1994	Hayden Anderson Michael Keiffer Kenny Hicks Willard Dause Albert Locklear Patricia Rouen John Spriggs Dione Bartmess Dan Hanson Mary O’Connor Wayne Hall Mike Halko Phyllis Cooke-Green Sharan Freiberg

Table 3: List of Injury Prevention Fellowship Program Graduates, by Year

1995	Mark D. Miller Diana M. Kuklinski Lovetta Phipps Chris B. Buchanan Barbara A. Spriggs Debra M. Meek Randy Benefield James R. Howell Angela Maloney	1996	Holly Billie Robert Bialas Wenonya St.Cyr Rebecca Lawrence Vince Garcia Emily Watchman Jennifer Lincoln Don Williams David Cramer Lynn Cook Sherry Fredericks-King Shirley Brewer Debra Haines	1997	Gordon Tsatoke, Jr. Marjorie Winters Tom Fazzini Donna M. Nez Kathleen A. O'Gara Nellie Benally Jim Spahr Teri L. Sanddal Patricia Harris Smith Alex Hardin	1998	Karen Arviso Gary Carter Casey Crump David Hogner Brad Husberg Karin Knopp James Ludington JoAnn Perank Tish Ramirez Tina Russel
1999	Bruce Chandler Arla Stroop Myrna Buckles Brian Johnson Ryan Hill Twyla "Zoe" Benally Dennis Renville Zahid Samad Tina Samm	2000	Bruce Etchison Michael Boley Nicole Horseherder Martin Smith Mark Byrd Bobby Villines Sue Hargis Nate Quiring Andrea Horn Sharon John Richard Skaggs Molly Patton	2002	Christopher W. Allen Jeff Dickson Myla Jensen Dan Kinsey Joseph LaFramboise Shirley Peaches Shelli Stephens-Stidham Sara A. Wagner Mona Zuffante	2003*	Frances C. Anchondo Andee Beaver Keechi Maria A. Benton Mary Alice Clark Sybil K. Cochran Montell Elliott Eldon R. Espling Helen Gregorio Jodi R. Johnson Danny Joseph Norma McAdams Michael S. Struwin Minnie Yazzie

Table 3: List of Injury Prevention Fellowship Program Graduates, by Year

2004	Larry Carlson Timothy P. Duffy Jim Ferguson Hayden R. Hardie Rebekah Hunkup Robert Morones Mark E. Pike Randolph G. Runs After Charles Woodlee	2005	Michelle Begay Mark Brewer Kyla Hagan George Hupp Holly Kostrzewski Elvira Martin Ina Mickelson Stephen Piontkowski John Schmitz	2006*	Lisa Aguerro Sherron Prosser Charlotte Ann Branham Samantha Holmberg Bonita Paddyaker Belinda Aungie Kathey Wilson Helen Garcia-Sisneros Angelita Chee Arturo Calvo	2007	Sherron Prosser Janae Price Siona Willie Stephanie Peebles Coffey Theresa Yazzie Dr. Verlee K. White Calfe-Sayler Susan E.C. Ducore Belinda Aungie Michael E. Reed, Jr. Bonny M. Weed Elisa DuBreuil
2008*	Fleurette Brown-Edison Mary Robertson-Begay Antoinette R. Short Amy R. Cozad Jason D. Hymer Darcy Merchant, Sr. Lyndon Endischee Robin Lee Janelle Trottier	2009*	Sarah-Jean T. Snyder Rebecca Morris Laquita F. Fish Karen M. Ansera Pamela A. Michaelson-Gambrell Dr. Verlee K. White Calfe-Sayler Bernice Bert Amanda Parris Le Ray Skinner Jennifer L. Franks Annie Phare	2011	Martin Stephens Tim Balderrama Bryan Reed Hillary Strayer Lisa Nakagawa Jacey McCurtain Dustin Joplin Jason Hymer David Bales Molly Madson Travis Bowser		

* This Fellowship year was a Program Development Class.
**There was not a Fellowship class in 2001 and 2010.

Another advanced educational program developed by the DEHS is the Institutional Environmental Health (IEH) Residency, which began in 1970 when IHS sent Public Health Service (PHS) Commissioned Officers to long-term training that was developed by the Federal Health Programs Service with Tulane University, School of Public Health and Tropical Medicine, and the New Orleans PHS Hospital. The New Orleans PHS Hospital was closed in 1986, so IHS took on responsibility for the IEH education and residency program at the Phoenix Indian Medical Center. In 1992, IHS entered into a Memorandum of Understanding with the Uniformed Services University of the Health Sciences (USUHS), Department of Preventive Medicine and Biometrics, to participate in the Master of Public Health (MPH) degree program. A 12-month post-graduate residency was developed to provide training in the area of environmental and occupational safety and health.

Participants selected for the IHS Long-Term Training Program enter a 2-year assignment located in Bethesda and Rockville, Maryland (year 1, USUHS, and year 2, post-graduate residency), or a 1-year assignment for the post-graduate residency only.

The graduate program at USUHS is fully accredited by the Council on Education for Public Health (CEPH). The second year is a post-graduate directed study residency. The residency utilizes a series of training and practical work experience rotations through federal healthcare organizations and other government and private institutions. The rotations are designed to develop the residents' skills in the core competencies of IEH by working with seasoned professionals in diverse IEH work environments. In addition to the rotations and training, residents will complete a research project designed to develop skill in an aspect of IEH, reinforce research techniques, and benefit IHS.

The IEH Residency-only track is designed for those applicants who have already obtained a Master of Science (MS) or MPH degree in environmental health, industrial hygiene, occupational health, or safety management. The duration of the residency will generally be 12 months, may or may not require relocation, and additional graduate-level course work may be necessary. The IEH Program Manager works together with the participant to ensure the requirements of the residency are met and expected competencies have been achieved.

There have been 23 IEH Residency Graduates to date (1986 to 2010). They can be found listed in chronological order in Table 4, on the next page.

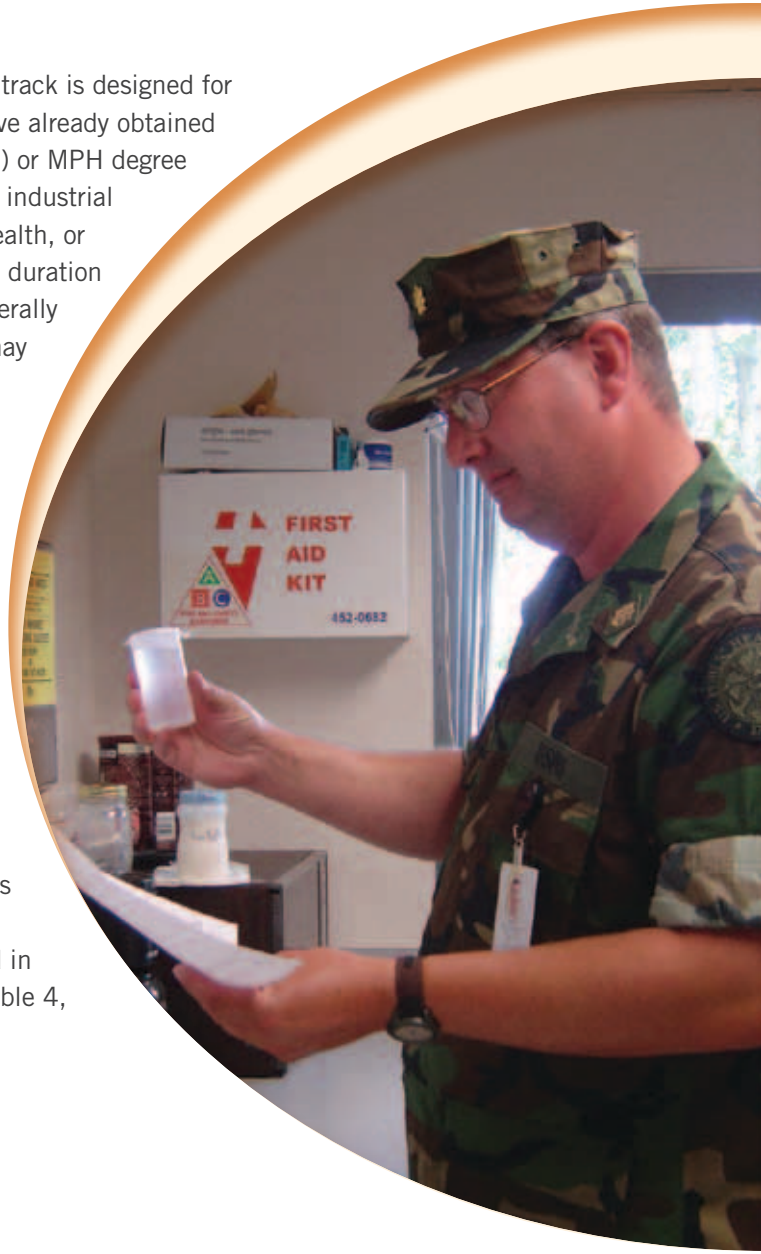


Table 4: IEH Residency Graduates

Graduate	Current Status	Residency Year
Jim Spahr	Transferred, CDC	1986
Bob Berger	Retired	1989
Al Knapp	Retired	1991
Mark Kelty	Retired	1992
Greg Heck	Retired, PIMC	1993
Curt Smelley	Aberdeen Area	1993
Gary Gefroh	Deceased	1994
David McMahon	IHS HQ	1994
Jeff Morris	Transferred	1995
Linda Tiokasin	Retired	1995
John Holland	Transferred	1997
Keith Cook	Alaska Area	1999
John Smart	Transferred, ASPR	1999
Kit Grosch	Nashville Area	2001
Chris Kates	Transferred, ASPR	2001
Gary Carter	Transferred, EPA	2003
Brian Hroch	Albuquerque Area	2003
David Cramer	Phoenix Area	2005
Mark Strauss	SEARHC	2005
Charles Woodlee	Navajo Area	2008
Danny Walters	Oklahoma Area	2009
Valerie Herrera	ANTHC	2010
Ricardo Murga	Phoenix Area	2010

PIMC = Phoenix Indian Medical Center.
ASPR = Assistant Secretary for Preparedness and Response.
EPA = Environmental Protection Agency.
SEARHC = South East Alaska Regional Health Consortium.
ANTHC = Alaska Native Tribal Health Consortium.

Staff recognition is another important aspect of DEHS retention efforts. Table 5 shows the distribution of PHS, IHS, and tribal awards presented to DEHS staff during CY 2011.

Table 5: Summary of Awards Received by DEHS Staff in CY 2011

Award Type	AB	AK	AQ	BE	BI	CA	NS	NV	OK	PH	PO	TU	TOTAL
PHS Awards													
Outstanding Service Medal			1							1			2
Commendation Medal			1							2		2	5
PHS Achievement Medal		4	1			1			1	2		1	10
PHS Citation		1						1	1	2		1	6
Crisis Response Service Award	1			1			1					1	4
Outstanding Unit Citation													0
Unit Commendation		8		4		1	1		2	10		5	31
Isolated Hardship		2											2
Training Ribbon				1						1			2
Field Medical Readiness Badge													0
Foreign Duty Award													0
Special Assignment Award									2				2
Hazardous Duty													0
Recruitment							1						1
IHS Area Awards	6		1	5				4	1	1	1	3	22
Civil Service Personnel Awards			1	1									2
National IHS Awards	3	1							1	1			6
Other National Awards		1											1
Tribal Awards								1		3			4
TOTAL AWARDS	10	17	5	12		2	3	6	8	23	1	13	100
% of Staff Receiving Awards													
Federal	NR	NR	27%	55%	NR	40%	100%	NR	NR	57%	NR	100%	
Tribal	NR	NR	NR	NR	NR	NR	0%	NR	NR	10%	NR	0%	

NR = No Report

Figure 3 shows the distribution of DEHS staff (N=285) within the Environmental Health Program.

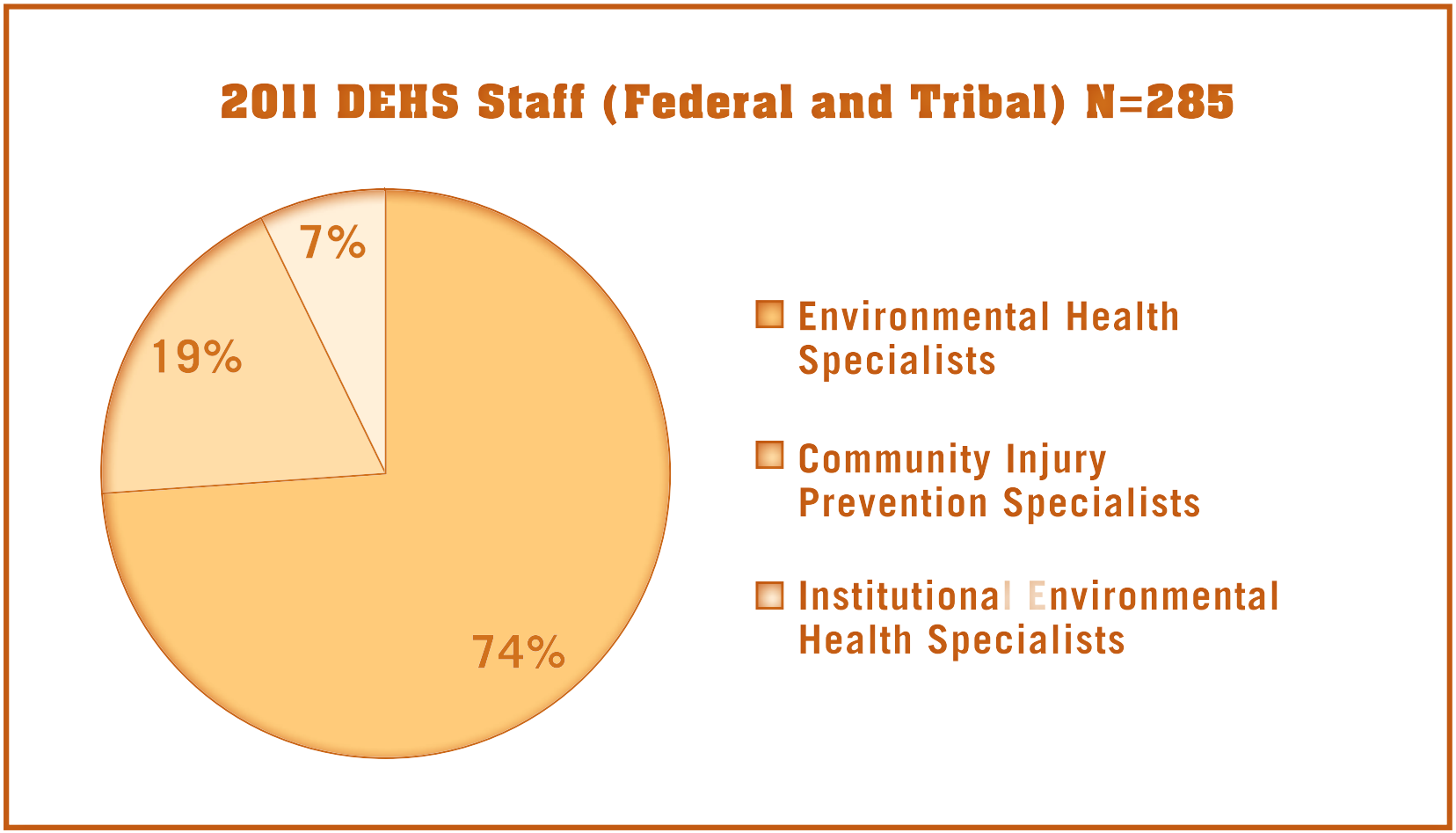


Figure 3: Distribution of DEHS staff within the national program

Thirty-one percent (31%) of all DEHS staff, including federal and tribal employees, have master's degrees in Public Health or a related field. Forty-six percent (46%) of federal staff and eighteen percent (18%) of tribal staff have this advanced degree. Figure 4 presents a breakout of DEHS staff with master's degrees, by discipline. Ninety-five percent (95%) of Institutional Environmental Health staff have master's degrees. Community Injury Prevention Specialists follow with twenty-eight percent (28%) and Environmental Health Specialists with twenty-six percent (26%).

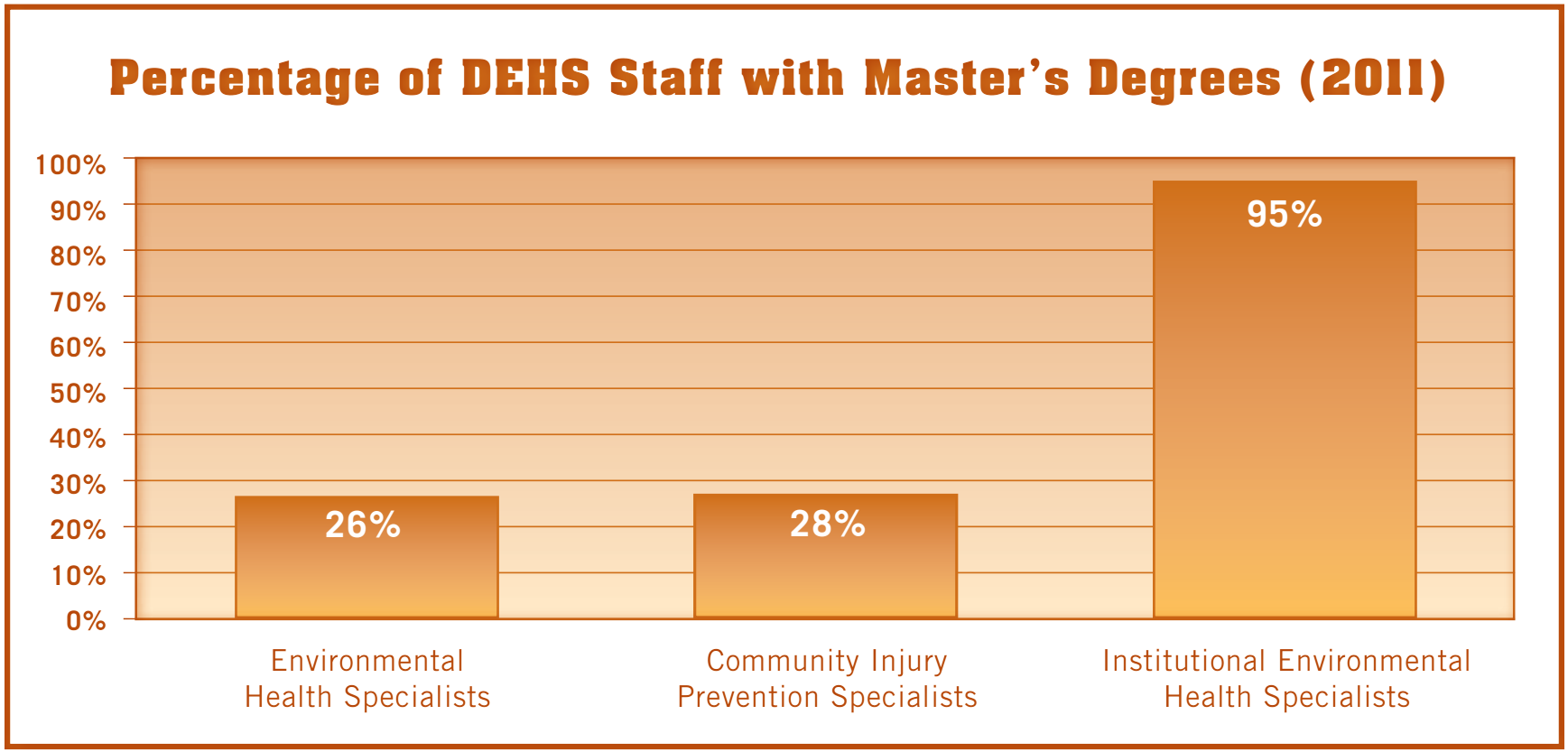


Figure 4: Percentage of DEHS staff with master's degrees

Fifty (50%) of all DEHS staff are Registered Sanitarians (RSs) or Registered Environmental Health Specialists (REHSs), with 66% of federal staff and 34% of tribal staff registered. Figure 5, below, summarizes registration according to specialty. Registration is highest in the IEH Program, with 75% of federal staff registered.

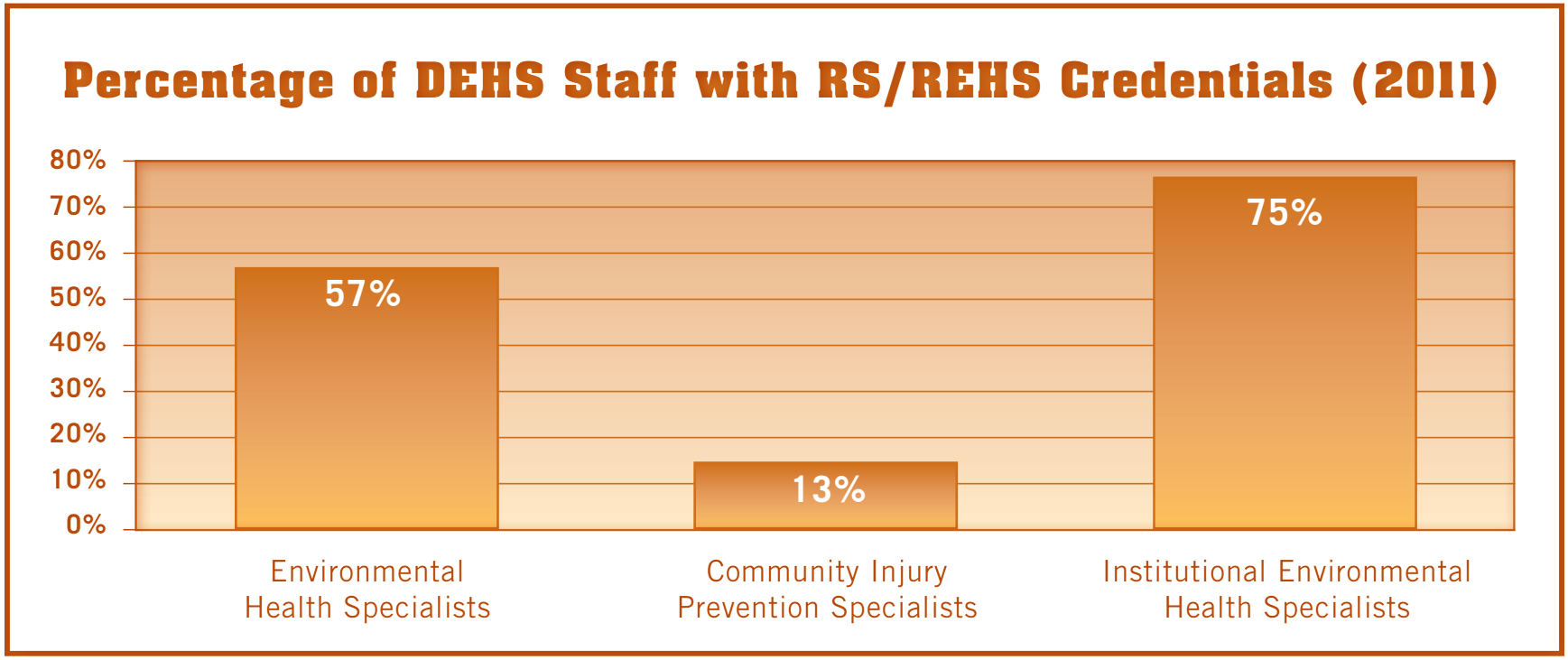


Figure 5: Percentage of DEHS staff with RS or REHS credentials

Twenty-two percent (22%) of all DEHS staff have completed the IHS Injury Prevention Fellowship Program; 22% are Child Passenger Safety Technicians; and 11% have met Food and Drug Administration (FDA) standards to conduct retail food service inspections. Table 6, below, summarizes these and other credentials.

Table 6: Summary of DEHS Staff Certifications

Federal and Tribal Staff	Environmental Health Specialist*	Community Injury Prevention Specialist*	Institutional Environmental Health Specialist*	Total
REHS/RS**	120	7	15	142
Injury Prevention Fellow	45	14	5	64
Certified Safety Professional	1	0	4	5
Certified Industrial Hygienist	0	0	3	3
Certified in Infection Control	0	0	0	0
Child Safety Passenger Safety Technician	44	18	1	63
Certified Playground Safety Inspector	24	1	0	25
Certified Radiation Protection Surveyor	4	0	11	15
Certified Environmental Health Technician	2	0	0	2
Diplomate, American Academy of Sanitarians	3	0	1	4
CHEM	2	0	2	4
FDA Standard	29	1	0	30
Lead/Asbestos Certification	6	0	5	11
IEH Residency	1	0	11	12

*Only full-time specialists were counted.

**Registered Sanitarian/Registered Environmental Health Specialist/Other State Registrations.

CHEM = Certificate of Health Care Environmental Management.

Beginning in 1993, DEHS has annually recognized an outstanding Environmental Health Specialist (EHS) for the year. Nominees are scored on three major categories: Special Achievements, Professionalism, and Innovation. 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, 1993 to 2011

2011	Bryan Reed, Bristol Bay Area Health Corporation	2001	Molly Patton, Tanana Chiefs Corporation
2010	Amanda M. Parris, Phoenix Area IHS	2000	Shawn Sorenson, South East Alaska Regional Health Corporation
2009	Timothy Duffy, Bemidji Area IHS	1999	Mike Welch, Phoenix Area IHS
2008	Holly Billie, Phoenix Area IHS	1998	Diana Kuklinski, Phoenix Area IHS
2007	Stephen Piontkowski, Phoenix Area IHS	1997	Mark Mattson, Bemidji Area IHS
2006	Troy Ritter, Alaska Native Tribal Health Consortium	1996	Harold Cully, Oklahoma Area IHS
2005	Andrea Horn, Phoenix Area IHS	1995	Keith Cook, Navajo Area IHS
2004	Celeste Davis, Albuquerque Area IHS	1994	Carol Rollins, Ho-Chunk Nation
2003	Casey Crump, Bemidji Area IHS	1993	John Sarisky, Navajo Area IHS
2002	Pete Wallis, Tanana Chiefs Corporation		

Individuals who received Area EHS of the Year, 2011, are highlighted below:

- Aberdeen Area, Martin Stephens
- Alaska Area, Bryan Reed
- Albuquerque Area, Katie Hubbard
- Bemidji Area, Megan Arndt
- California Area, Brian Lewelling
- Navajo Area, Samantha Claw
- Oklahoma Area, Aaron McNeill
- Phoenix Area, Molly Madson
- Portland Area, Shawn Blackshear
- Tucson Area, Travis Bowser

From the above list of nominees, the selectee for the IHS EHS of the Year, 2011, was Mr. Bryan Reed of the Alaska Area. His write-up and photo can be found on the next page.

Indian Health Service Environmental Health Specialist of the Year, 2011

BRYAN REED, REHS, ALASKA AREA

The Alaska Area IHS Office of Environmental Health and Engineering nominated Bryan Reed for the 2011 IHS Environmental Health Specialist (EHS) of the Year. In 2006, Mr. Reed served as the Field EHS, and in 2009 he was promoted to Manager of the Department of Environmental Health and Safety at the Bristol Bay Area Health Corporation (BBAHC) in Dillingham, Alaska. In this position, he currently oversees the Environmental Health, Injury Prevention and Remote Maintenance Worker (RMW) programs that serve 7,532 residents of 34 Alaska Native Tribal Villages in a remote and roadless area totaling 46,714 square miles.

SPECIAL ACCOMPLISHMENTS

Grant Award Success – Through excellent grant management, Mr. Reed has played a leading role in implementing capacity building initiatives for the tribes of Southwest Alaska. With the aid of an EPA Indian General Assistance Program (IGAP) grant award, two specialized training programs focused on Alaska-specific service needs have been offered in 2011. In addition to the tribal environmental programs, drinking water and wastewater training programs have also been hosted through funding from the RMW Program. Not only have his efforts focused on tribes, he has also ensured that training is available for Environmental Health staff and other BBAHC employees. He secured funding that will support a local Child Passenger Safety (CPS) program, arranged for two staff members to attend a CPS technician training course, and hosted an in-region CPS course in 2012. Through a grant from the Substance Abuse and Mental Health Services Administration (SAMHSA), he coordinated the first Applied Suicide Intervention Skills Training (ASIST) to be taught in Bristol Bay in several years. Ten BBAHC staff attended the first training in December 2011. Combined, over 55 Bristol Bay residents have received specialized training during the calendar year.

Injury Prevention Program – IP Epidemiology Fellowship. Mr. Reed is 1 of 11 EHSs accepted into the 2011 IHS Injury Prevention Epidemiology Fellowship Program. As a Fellow, Mr. Reed is responsible for designing and completing an injury prevention-specific project that will address a local injury prevention issue and for carrying out the implementation of the project. His project is focused on evaluating existing Bristol Bay region injury surveillance data and comparing these data with public economic data associated with the primary economy of the region – commercial salmon fishing. The project goal is to understand how the economy of this region impacts severe injuries among its residents. Project results will be used to educate key stakeholders, mobilize partnerships focused on addressing injuries, and support regional planning efforts.

Village Health Clinics – Mr. Reed stepped up as the primary point of contact for the BBAHC and assisted the Community Health Aid Program (CHAP) with the construction and transition of two new village health clinics. These new clinics are a tremendous improvement in providing essential healthcare services to community members because healthcare services are not otherwise available in their villages. Unlike previous clinic construction projects, these presented several unique challenges that nearly prevented the projects from being completed. Each tribal village invested a significant amount of time and money into the successful completion of these projects. Both projects have successfully been completed, and occupancy into the new facilities will be completed in January 2012.

PROFESSIONALISM

Mr. Reed holds the REHS credential (2005), has a B.S. degree in Environmental Health (Western Carolina University, 2005), is currently on course to complete his M.P.H. degree (University of Alaska-Anchorage) in the spring of 2013, and has maintained a 4.0 GPA (grade point average) through more than 18 hours of course work. Throughout the year, Mr. Reed conducted eight presentations to the BBAHC's Executive Board. During these meetings, information was provided to update the Board on progress with the sanitation system project, sanitation system failures, and changes in village utility operations. In January 2011, Mr. Reed coordinated the attendance of the Sanitation System and Health Clinic Project management staff from the Alaska Native Tribal Health Consortium (ANTHC) and State of Alaska Rural Utility Business Advisory (RUBA) staff to attend the BBAHC Annual Full Board meeting. During this meeting, Reed and the respective delegates met with nine tribal leaders to develop future sanitation system projects and to address village-specific infrastructure needs.

Mr. Reed supervises two Environmental Health Officers, two IP Specialists, two RMWs, and an administrative assistant/laboratory technician. In 2011, Reed co-mentored JrCOSTEP Lailani Rockholt. Furthermore, he frequently assisted two new department directors from the BBAHC's Community Health Aid Program and Health Education Program as they transitioned into their new leadership roles.

INNOVATION

Surveillance System Development – Mr. Reed conceptualized and received funding to develop a sanitation system database and surveillance system that will be used to monitor complaints, failures, and preventive maintenance activities occurring within the Bristol Bay region. The system will be used to quantify the types of challenges experienced by sanitation system utilities, investigate the events taken to mitigate them, and develop plans to educate community members and technical assistance providers on system-specific challenges. Another goal is to link the specific public health needs with appropriate funding and technical assistance agencies so that improvements can be made to ensure the systems continue to operate to their capacity.

Environmental Health Business Plan – Early in 2011, Mr. Reed developed a business plan for the Department of Environmental Health and Safety that aligns with the BBAHC's Strategic Plan. The plan implemented the following: identified specific measures to

increase monitoring of public health impacts in Bristol Bay; continued to investigate public health issues (i.e., severe injuries, rabies, and botulism); performed various educational events, including a tribal capacity building class; increased education in schools; and provided topic-specific materials to the BBAHC's leadership (i.e., climate change, impacts of resource development, impacts of the International Classification of Diseases, 10th Edition [ICD-10], implementation, and others). Additional focuses in the business plan included using a business case approach to operating and developing plans to sustain and increase program funding, evaluating the effectiveness of the services delivered by the Department, and pursuing appropriate research opportunities focused on improving the health of Bristol Bay residents.

Water Testing Time Study – In an effort to successfully manage challenging financial times, Mr. Reed evaluated the feasibility of charging for community water samples analyzed at the BBAHC's three state-certified drinking water laboratories. (Previously, samples were analyzed free of charge.) To gain a better understanding of the operating costs of the labs, Reed developed and implemented a "time study" to track the amount of staff time spent performing drinking water lab activities. The study enabled Mr. Reed to identify the amount of time and true costs of performing drinking water lab activities, thus enabling a fee structure to be established.

Research Projects – Mr. Reed was instrumental in the development of two Public Health research projects in 2011. He is credited with co-designing a funded multiagency project that focuses on conducting climate change assessments in Bristol Bay Tribal Villages. The focus of the project is to examine the effects of climate change and link them to changes in traditional lifestyle. The second project is titled "Improving Respiratory Health in Alaskan Native Villages." Reed served as the primary point of contact at the BBAHC and is credited with gaining local project approval. This project also involves multiple agencies and is focused on monitoring the indoor air quality of homes of youth with chronic respiratory issues, conducting interventions, and performing follow-up monitoring to evaluate the effects of the applied interventions.

Bryan Reed is dedicated to serving as an EHS in a career focused on Public Health. He is recognized for his diversity, vision, and efforts to be a proficient leader. He strives to design and implement programs based on the Ten Essential Public Health Services.

PROGRAM VISION

In addition to Area efforts to develop policies and plans, program strategic planning continued to be a major national emphasis during 2011. Approximately 30 DEHS staff were involved on teams formed to create significant, tangible progress on the four Primary Vision Elements conceived during the February 2007 annual meeting held in Nashville, Tennessee. Program leadership (HQ and Area Environmental Health Services Directors) identified these four initiatives as having the most positive impact on the DEHS Program over the next several years. These initiatives follow.

DEHS Primary Vision Elements
1. A nationwide clear and uniform definition of needs to make a compelling case for budget and prioritization of our work
2. A dynamic, effective, and sustainable DEHS data system
3. Standardized guidelines across the program that support uniform program management and result in positive outcomes
4. Active involvement in budget and RRM discussions

These Primary Vision Element Teams were supported by a Core Group comprising several HQ and Area-level staff. The Core Group was responsible for reviewing work products from the four teams and for providing input to each of the teams through liaison members.

In April 2008, over 31 DEHS staff from the 12 IHS Areas participated in a 3-day strategic planning workshop in Denver, Colorado. The objective of this workshop was to provide a working session for the four teams. During this workshop, each team provided a progress update to the group-at-large, conducted work on their initiatives, and provided deliverables and/or a projection of deliverables for moving forward.

On August 18 and 19, 2009, a combination of DEHS senior leadership, mid-level management, and field office staff met in Tulsa, Oklahoma, to participate in a 2-day strategic planning workshop dedicated to informing, brainstorming, and continuing progress on key strategic initiatives for the DEHS Program. This workshop was designed as an opportunity for (1) the four Primary Vision Element Teams to share their progress; (2) capturing lessons learned from the past experiences of team members; and (3) identifying any additional strategic initiatives for the Program.

A summary of the accomplishments of the teams follows:

- **Team 1 – An Improved Definition of Needs:** In 2009, this team developed five briefing document templates for the five national priorities they established in 2008. These national priorities are children's environment, safe drinking water, food safety, vectorborne and communicable diseases, and healthy homes. Currently, IHS is using the priorities and templates to guide the DEHS Program;
- **Team 2 – A Dynamic, Effective, and Sustainable Data System:** Team 2 developed a feasibility study with five alternatives for replacing the existing DEHS data system, WebEHRS (the Web-based Environmental Health Reporting System). During the 2009 meeting in Tulsa, Area representatives approved alternative 5, a Commercial-Off-The-Shelf

system that will be modified to meet IHS needs. Funds for the first year were secured at HQ, and staff have procured the services for this system. The contract for the development of the system was signed in 2010, and the new system is currently in use. A dynamic stage of implementation, including collecting and incorporating user feedback, will continue into 2012;

- **Team 3 – Standardized Guidelines:** This team has taken on the task of rewriting Chapter 11 of the Indian Health Manual. This chapter establishes the policy, objectives, responsibilities, and functions of a comprehensive community-based Environmental Health and Engineering Program. During 2010, the team developed a new draft of Chapter 11 that was reviewed. In 2011, comments from IHS management were being addressed, and the chapter will go through the IHS policy approval process;
- **Team 4 – Resource Requirement Methodology (RRM):** In 2008, Team 4 began drafting a written document and a slide presentation that explain how the DEHS RRM is calculated. RRM is used, in part, to determine funds distribution nationally and in the Areas. The team believed that institutional knowledge of this process should be captured. At the 2009 meeting, the document was presented for review and input from the Core Group. Comments were received, and the document was updated and distributed to the Office of Environmental Health and Engineering (OEHE) and DEHS Directors for review and comment. The final document was completed in 2010 and is in use; and
- **Team 5 – Effective Marketing to Internal and External Stakeholders:** In 2009, a Vision Element was added to the four Primary Vision Elements. It was found that there was a need to develop communication tools in order to demonstrate to our customers (the communities served, HHS and IHS personnel, and external partners) the breadth of our Program and positive impacts made on the health and well-being of tribal members. The team was charged with the development of a DEHS informational toolbox that provides DEHS personnel with presentation materials for effective communication of Program components, capacity, strengths, and achievements to a variety of audiences. These materials are complete and have been distributed to the areas for use.

DEHS

Operating Philosophy and Services

OUR OPERATING PHILOSOPHY

The operating philosophy of the Division of Environmental Health Services (DEHS) Program is based on the Ten Essential Public Health Services first articulated in 1994 by a partnership of local, state, and national public health leaders. These services were used by the National Center for Environmental Health of the Centers for Disease Control and Prevention (CDC) as a basis for its six goals for the revitalization of environmental health in the 21st century. IHS has taken a proactive approach and adapted the Ten Essential Public Health Services as the Ten Essential Environmental Health Services and has incorporated this set of strategies into the methods in which it delivers services to American Indian/Alaska Native (AI/AN) communities across the country.

The Ten Essential Environmental Health Services are as follows:

ASSESSMENT:

1. Monitor health status to identify community health problems.
2. Diagnose and investigate health problems and health hazards in the community.

POLICY DEVELOPMENT:

3. Inform, educate, and empower people about environmental health issues.
4. Mobilize community partnerships to identify and solve environmental health problems.
5. Develop policies and plans that support individual and community environmental health efforts.

ASSURANCE:

6. Support laws and regulations that protect health and ensure safety.
7. a) Link people to needed environmental health services and b) Assure the provision of environmental health services when otherwise unavailable.
8. Assure a competent environmental health workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based environmental health services.

SYSTEM MANAGEMENT:

10. Conduct research for new insights and innovative solutions to environmental health problems.

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 Program projects conducted throughout the tribal communities served by the DEHS Program can be found on the following pages.

CORE SERVICES TO AI/AN COMMUNITIES

The DEHS is a comprehensive, field-based program with an overarching responsibility to provide community environmental health support. Our staff are composed of 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.

2011 DEHS Program Performance
Service to over 19,000 facilities
More than 7,000 surveys
Over 360 environmental health investigations
More than 500 training activities

For the DEHS Program, health monitoring activities not only include real-time surveys for a variety of public health-related issues but also the proactive use of regional and national information systems to manage, track, and respond to trends and issues. Program staff provided services to a total of 19,130 facilities during 2011 (Source: Web-based Environmental Health Reporting System [WebEHRS] Reports, National Establishment Counts, FY 2011). These services included 10,825 activities with 7,823 that monitored the environmental health status of these facilities (Source: WebEHRS Reports, Activity Reports, sorted by filter, month, and type). Also, staff reported in WebEHRS that there were 363 investigations conducted and 523 training sessions provided.

In 2009, five national focus areas were developed: children's environment, safe drinking water, food safety, vectorborne and communicable diseases, and healthy homes. Details on Program projects conducted throughout the tribal communities served by the DEHS Program can be found in the DEHS National Focus Areas section of this document.

In 2010, an Implementation Team continued to serve as a "board" to address user interface problems and questions, and recommend and review enhancements and changes to the Notifiable Disease and External Cause of Injury (NDECI) Web-based data retrieval system. The NDECI system retrieves specific injury or disease categories for tracking and reporting using "passively" exported Resource Patient Management System (RPMS) data to national programs. The application tracks and reports the targeted injury or disease categories via a Web-based application that can provide reports by national, Area, service unit, facility, and community levels. The application also supports a robust security system that allows designated national- or Area-level users to provide access to appropriate staff in their respective organizations. Data can be retrieved by International Classification of Diseases, 9th Revision, codes used to define the groupings for injuries, asthma, notifiable diseases, intestinal diseases, and vectorborne diseases.

In 2011, a team of subject matter experts from across the DEHS worked closely with a software vendor to address the need to revolutionize WebEHRS so that the system could meet the dynamic requirements of environmental health in IHS. The outcome was a framework for an advanced and sustainable system with new features including enhanced eSurvey capabilities, improved report formatting, and a mobile application for field use. The system will be rolled out in 2012.

SPECIALIZED SERVICES TO AI/AN COMMUNITIES

The DEHS provides specialized services in community injury prevention and institutional environmental health for focused support and consultation. Community Injury Prevention Specialists take the lead in working with communities to develop public health strategies to reduce the burden of injury experienced by AI/AN communities. Institutional Environmental Health Specialists have skills to identify, evaluate, and respond to unique environmental safety hazards found in healthcare, educational, childcare, correctional, and industrial facilities. Special accomplishments for the two specialized services can be found in the next section of this report.

COMMUNITY INJURY PREVENTION PROGRAM

A comprehensive injury prevention intervention targets several strategies (education, legislation and enforcement, and environmental modification) rather than only one. Comprehensive interventions implemented by the Areas throughout 2011 included (1) provision of the National Highway Traffic Safety Administration's 32-hour "Technician Certification" course to staff who install car seats, (2) advocacy meetings with tribal councils, (3) awareness campaigns in communities, (4) implementation of primary seatbelt laws, (5) implementation of motor vehicle checkpoints that look for incorrect or no use of child car seats, (6) implementation of the IHS Ride Safe Child Passenger Safety Program (the Ride Safe Program) in Head Start Programs, (7) distribution and installation of car seats by trained professionals, and (8) child safety car seat clinics.

In 2011, tribes in five Areas (Aberdeen, Alaska, California, Oklahoma, and Phoenix) received CDC funding to support comprehensive tribal motor vehicle intervention programs. Each program utilizes comprehensive effective strategies (education, legislation and enforcement, and environmental modification). Tribes in 10 Areas (Aberdeen, Alaska, Albuquerque, Bemidji, California, Nashville, Navajo, Oklahoma, Phoenix, and

Portland) received IHS Tribal Injury Prevention Cooperative Agreement Program (TIPCAP) funding that included at least one component of a comprehensive motor vehicle occupant restraint program.

To assist tribes in building injury prevention infrastructure and capacity, IHS began awarding Cooperative Agreements in 1997. During this initial funding cycle, 13 tribes or tribal organizations were awarded 3-year program awards of $25,000 each and four 1-year training or conference attendance awards at $5,000 each. In 2000, this program was announced again, with increased program funding of $50,000 for 5 years with 25 awards; increased project funding of $15,000 for 3 years with 11 awards; and 1-year training or conference attendance awards of $5,000 with 3 awards.

In 2004, there was supplemental funding awarded to eight tribes for 1 year. Five of these awards were for program grants, and three were for projects. The 2005 to 2010 award cycle of 5-year Cooperative Agreements totals more than $1 million to 32 tribes, beginning in FY 2005. In 2010, the program was announced for another cycle that began in September and will run through 2015. The program included an increase from $50,000 to $65,000 for 5 years to 16 tribes. Seven tribes were awarded grants for small projects at $10,000 for 3 years. There were also 17 tribes awarded continuing funding for $80,000 for 5 years. In 2010, the Community Injury Prevention Program distributed approximately $2.47 million through TIPCAP. A summary of this funding, by tribe, is presented in Table 8, on the following pages.

Table 8: IHS TIPCAP Funding

	Funding Cycle	1997 to 2000		2000 to 2005			2004		2005 to 2010			2010 to 2015		
	Tribe	$25,000 for 3 yrs	Up to $8,000 for 1 yr	$50,000 for 5 yrs	$15,000 for 3 yrs	$5,000 for 1 yr	$50,000 for 1 yr	$15,000 for 1 yr	$75,000 for 5 yrs	$50,000 for 5 yrs	$10,000 for 3 yrs	$65,000 for 5 yrs	$80,000 for 5 yrs	$10,000 for 3 yrs
1	United Tribes Technical College	X		X										
2	Pueblo of Jemez	X		X					X				X	
3	Ysleta del Sur Pueblo	X												
4	Bristol Bay Area Health Corporation	X												
5	Pokagon Band of Potawatomi Indians	X												
6	Fort Peck Assiniboine & Sioux Tribes	X												
7	Hoopa Valley Tribe	X		X										
8	Miccosukee Corporation	X												
9	Osage Nation of Oklahoma	X								X				
10	Sac & Fox Nation	X												
11	Fallon Paiute Shoshone Tribe	X												
12	Yavapai-Prescott Indian Tribe	X												
13	Jamestown S'Klallam Tribe	X												
14	Ponca Tribe of Nebraska		X		X									
15	Aleutian Pribilof Islands Association		X											
16	Houlton Band of Maliseet Indians		X		X						X			
17	Ponca Tribe of Oklahoma		X	X										
18	Spirit Lake Tribe			X										
19	Three Affiliated Tribes			X										
20	Trenton Service Area			X										
21	South East Alaska Regional Health Consortium			X					X				X	
22	Kodiak Area Native Association			X										
23	Fond Du Lac Reservation			X					X				X	

Table 8: IHS TIPCAP Funding (continued)

	Funding Cycle	1997 to 2000		2000 to 2005			2004		2005 to 2010			2010 to 2015		
	Tribe	$25,000 for 3 yrs	Up to $8,000 for 1 yr	$50,000 for 5 yrs	$15,000 for 3 yrs	$5,000 for 1 yr	$50,000 for 1 yr	$15,000 for 1 yr	$75,000 for 5 yrs	$50,000 for 5 yrs	$10,000 for 3 yrs	$65,000 for 5 yrs	$80,000 for 5 yrs	$10,000 for 3 yrs
24	Bad River Band of Lake Superior Tribe of Chippewa Indians			X									X	
25	Rocky Boy Tribal Health			X										
26	St. Regis Mohawk Tribe			X										X
27	Eastern Band of Cherokee Indians			X										
28	Hardrock Chapter			X					X				X	
29	Navajo Nation			X					X				X	
30	Colorado River Indian Tribes			X								X		
31	First Mesa Consolidated Villages			X										
32	Reno-Sparks Indian Colony			X								X		
33	California Rural Indian Health Board, Inc.			X					X				X	
34	Chickasaw Nation			X										
35	Caddo Nation			X					X					
36	Comanche Nation of Oklahoma			X										
37	The Kaw Nation			X					X				X	
38	Pascua Yaqui Tribe of Arizona			X										
39	Rosebud Sioux Tribe				X									
40	Southcentral Foundation				X									
41	Mille Lacs Band of Ojibwe				X									
42	White Earth Reservation Tribal Council				X						X			
43	Gerald L. Ignace Indian Health Center				X									
44	Stockbridge-Munsee Community Band Mohican Indians				X						X			X
45	Wichita and Affiliated Tribes				X									
46	White Mountain Apache Tribe				X					X				
47	Ak-Chin Indian Community				X									X
48	Dakota Center for Independent Living					X								
49	Grand Traverse Band of Ottawa and Chippewa Indians					X								
50	Sault Ste. Marie Tribe of Chippewa Indians					X								
51	Winslow Indian Health Care Center, Inc.						X							
52	Oneida Tribe of Wisconsin						X			X			X	
53	Sisseton-Wahpeton Oyate of the Lake Traverse						X			X			X	
54	Norton Sound Health Corporation						X			X			X	
55	Pawnee Nation of Oklahoma						X							
56	Chilkoot Indian Association							X						
57	Mount Sanford Tribal Consortium							X						
58	Aroostook Band of Micmacs							X						
59	NNAHA Ojibwe Tribes								X					
60	Toiyabe Indian Health Project, Inc.									X				
61	Choctaw Nation of Oklahoma									X			X	
62	Bristol Bay Area Health Corporation									X			X	
63	San Felipe Pueblo									X			X	

Table 8: IHS TIPCAP Funding (continued)

Funding Cycle		1997 to 2000		2000 to 2005			2004		2005 to 2010			2010 to 2015		
Tribe		$25,000 for 3 yrs	Up to $8,000 for 1 yr	$50,000 for 5 yrs	$15,000 for 3 yrs	$5,000 for 1 yr	$50,000 for 1 yr	$15,000 for 1 yr	$75,000 for 5 yrs	$50,000 for 5 yrs	$10,000 for 3 yrs	$65,000 for 5 yrs	$80,000 for 5 yrs	$10,000 for 3 yrs
64	Indian Health Council, Inc.									X			X	
65	Standing Rock Sioux Tribe									X				
66	Kiowa Tribe of Oklahoma									X			X	
67	Quechan Indian Tribe									X			X	
68	Lac Vieux Desert Band of Lake Superior Chippewa Indians										X			
69	Pyramid Lake Paiute Tribe										X			
70	Jena Band of Choctaw Indians										X			
71	Chitimacha Tribe of Louisiana										X			X
72	Nambe Pueblo										X			
73	Sapulpa Indian Health Center										X			
74	Seneca-Cayuga Tribe of Oklahoma										X			
75	Gila River Indian Community											X		
76	San Carlos Apache											X		
77	Hualapai Tribe											X		
78	Northwest Washington Indian Health Board											X		
79	Northwest Portland Area Indian Health Board											X		
80	Oglala Tribe											X		
81	Great Plains Tribal Chairmen's Health Board											X		
82	Maniilaq Association											X		
83	Tanana Chiefs Conference											X		
84	Ho-Chunk Nation											X		
85	Menominee Indian Tribe of Wisconsin											X		
86	Tule River Indian Tribe											X		
87	Tuba City											X		
88	Absentee Shawnee Tribe											X		
89	Southern Ute Indian Tribe													X
90	Walker River Paiute Tribe													X
91	Greenville Rancheria													X

The collaboration between the IHS Community Injury Prevention Program and the *IHS Primary Care Provider* began in 2007. As an outgrowth of this collaboration, the July issue of each year is dedicated to injury prevention. The 2007, 2008, 2009, 2010, and 2011 issues presented articles on cost of injuries, guiding principles of the Injury Prevention Program, TIPCAP, a case study on partnerships, and other injury prevention-related strategies addressing issues such as lack of occupant restraint use in motor vehicles, gang violence, and suicide.

In 2011, the IHS Community Injury Prevention Program, the U.S. Fire Administration, and the IHS Head Start Program continued the support for the Sleep Safe Fire Safety Program (Sleep Safe Program), which ultimately began as an IHS Injury Prevention Fellowship project. The National Indian Safe Home Coalition (NISHC) began as an extension of Wendy Fanaselle's IHS Injury Prevention Fellowship Project in 1993. Harold Cully, former Oklahoma Area Injury Prevention Specialist, led this multiagency, multi-nonprofit organization coalition that provided

funding, primarily through the U.S. Fire Administration, to AI/AN communities to reduce fire and burn injuries in their homes. In 1998, Diana Kuklinski, former Bemidji Area Injury Prevention Specialist, led the development of a new program, Sleep Safe, which was based on the same concept of community mobilization used in the NISHC. The goal of the Sleep Safe Program is to reduce the fire and burn injury rate for AI/AN children, ages 0 to 5 years, by increasing the use of operable smoke alarms in homes, providing a fire safety curriculum in Head Start Programs, and developing and adopting tribal laws requiring fire safety codes in homes. The Sleep Safe Program is funded by the U.S. Fire Administration, the IHS Community Injury Prevention Program, and the IHS Head Start Program.

Building on the same concepts used in the Sleep Safe Program, Chris Allen, through his IHS Injury Prevention Fellowship project, developed the Ride Safe Program in 2002. The goal of the Ride Safe Program is to reduce motor vehicle-related injuries to AI/AN children, ages 3 to 5 years, by increasing the correct use of child safety seats; providing child passenger safety instruction to Head Start staff, parents, and caregivers; and conducting home visits and observational safety seat surveys in communities. The Ride Safe Program has been funded through the National Highway Traffic Safety Administration, the Health Resources and Services Administration, the IHS Community Injury Prevention Program, and the IHS Head Start Program.

For the 2011 to 2012 school year, in addition to parents and teachers, caregivers such as grandparents of children up to 5 years of age were included in the Sleep Safe Program. Twenty-five Head Start Programs were funded $150,000 for Sleep Safe, and nearly 2,000 smoke alarms were distributed to Head Start families with children. Also, IHS continues to support Ride Safe. Twenty-nine Ride Safe Head Start projects were funded a total of $102,360 in the 2011 to 2012 Head Start school year. Over 1,900 child safety seats were distributed to Head Start families with children. Since 1999, the Sleep Safe Program has provided $1.95 million and more than 42,000 smoke alarms. Since 2002, Ride Safe has provided $1.4 million and more than 10,000 child safety seats to AI/AN Head Start Programs to reduce motor vehicle deaths and injuries.

INSTITUTIONAL ENVIRONMENTAL HEALTH PROGRAM

WebCident is a critical data collection and analysis tool supporting healthcare accreditation in the areas of information management, medication management, environment of care, and regulatory concerns for occupational safety and health reporting. Since its launch in 2002, WebCident has collected information on more than 135,000 worker, visitor, and patient incidents at 619 IHS and tribal facilities. During 2011, there were 45,877 incidents reported.

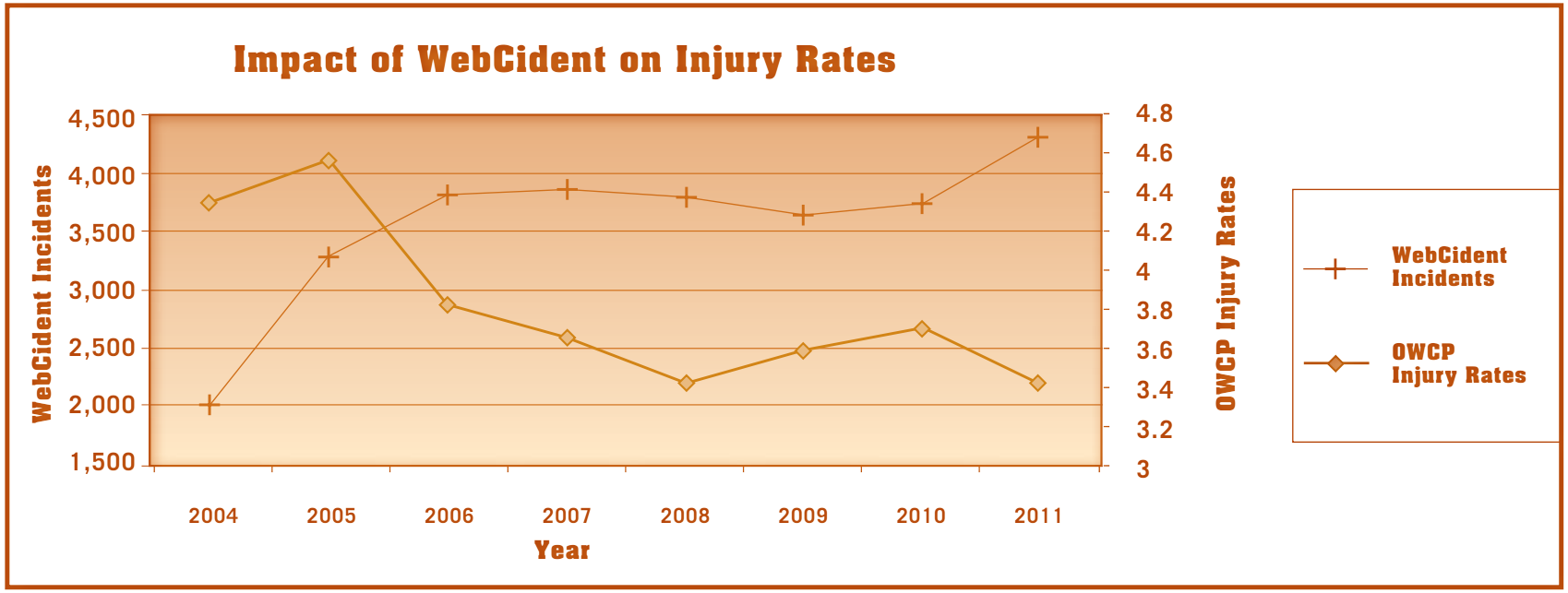


Figure 6: Worker WebCident-reported incidents and OWCP injury rates from 2004 to 2011

Figure 6, above, shows the impact of incident reporting on the reduction of workers' compensation case rates (Source: Office of Workers' Compensation Programs [OWCP]). As more worker, hazardous condition, and security incidents are reported and investigated, safety programs improve and help to reduce the number of employees being injured each year, which results in fewer workers' compensation cases.

In 2006, the Office of Clinical and Preventive Services (OCPS) staff asked the Environmental Health Data Systems Manager and the Institutional Environmental Health Program Manager to work with them in expanding WebCident to collect patient safety data such as medication errors, patient falls, and adverse drug events. The patient safety expansion was very successful. Since it began, the WebCident pharmacy medication error module has saved IHS $250,000 each year for costs associated with the reporting system it replaced. The patient safety component was a performance measure for OCPS and, by the end of 2011, had accumulated 104,032 incidents to monitor and evaluate.

DEHS National Focus Areas

The IHS Division of Environmental Health Services (DEHS) delivers a comprehensive environmental health program to more than 1.9 million American Indian/Alaska Native (AI/AN) people in 35 states. We consult with and provide technical assistance to tribes in an effort to provide safe, healthy environments. The IHS DEHS identified five national focus areas: children's environment, safe drinking water, food safety, vectorborne and communicable diseases, and healthy homes. Below you will find descriptions of each of the focus areas and highlights of projects conducted by the Areas in 2011. Evidence-based or promising practices are used most often, but specific projects are also evaluated for effectiveness. Comprehensive interventions use a multi-target approach involving education, environmental modification, and legislation and enforcement. The following four key activities are common to each of the focus areas:

- Conduct inspections that identify environmental health risk factors;
- Suggest corrective actions to reduce or eliminate risk factors;
- Conduct investigations of disease and injury incidents; and
- Provide environmental health training classes to federal, tribal, and community members.

CHILDREN'S ENVIRONMENT

The IHS DEHS is responsible for ensuring environmental health settings for AI/AN children are safe and ultimately provide a healthy environment in which to learn, play, and grow. Environmental health issues associated with children are present in schools, Head Start Centers, and daycare facilities on tribal lands. These issues present an ever-increasing set of complex challenges to be addressed. A few examples of environmental health-related issues of concern are as follows: indoor air quality, lead exposure, and infectious disease exposure. DEHS staff provide 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.

Results vary across the country, but 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 are the same violation that has occurred in more than one consecutive facility inspection. Some DEHS staff focus on eliminating risk factors related to fire safety, emergency response, asthma triggers, lead-based paint, bullying, communicable disease exposure, or child passenger safety. Specifically:

- The Oklahoma City Area (OKC) worked with the Cheyenne and Arapaho Tribes of Oklahoma Canton Head Start Program to identify a site for a new Head Start. The program had occupied a historic building with child-related health concerns since the late 1980s. Planning and design meetings and assistance in securing grants for a new building were provided by the OKC program, and a new building will be constructed in 2012;
- The Albuquerque Area started a 5-year Head Start Injury Database Project to provide Tribal Head Starts with a method for tracking injury trends and an aid to provide recommendations to address the trends. Incidents are tracked, forwarded to the DEHS for incorporation into Epi-Info, where data are analyzed for the leading causes of injuries and the circumstances surrounding the injuries. A report of findings, including graphics to illustrate resulting trends, is created and the information presented to the Head Start. Head Start staff are provided with training on how to identify trends and intervention methodology to reduce injury rates. In 2011, a total of eight participating Head Starts were included in the program, and 19 Head Starts received training on the system. This database provides continuity for injury prevention in centers with high staff turnover rates and adds to the sustainability of the overall Injury Prevention Program. In upcoming years, the Area hopes the database will be adopted by the National Tribal Head Start Program;
- The California Area provided child safety seats, smoke detectors, and bicycle helmets for tribal health programs to distribute to community members. Educational initiatives in conjunction with this project heightened awareness for the prevention of injuries. More than 640 child safety seats, 550 bicycle helmets, and 500 smoke detectors were distributed, with a value of $40,000. Eight training courses were conducted with 57 participants. Five car seat checkpoints and six bicycle rodeos were supported in the communities. Four tribal health programs reported that five children

were adequately protected from serious injuries in crashes because they were using personal protective equipment provided by this initiative;

- The Phoenix Area assisted the San Carlos Apache Tribe in becoming the fifth Arizona Tribe to enact a primary occupant restraint law. Previous efforts to address an occupant protection law were unsuccessful; however, the collaborative effort of the Tribal Police Department, Tribal Health and Human Services, Tribal Attorney, Tribal Judiciary, Tribal Council, and DEHS staff made passage of the law in November 2011 successful. Although it is too soon to quantify the impact of the law, the potential for increasing occupant restraint use and reducing motor vehicle-related injury is great, as the average child safety seat use rate was only 8% prior to the law's enactment; and
- The Albuquerque Area managed an abandoned hand-dug well project. Historically, hand-dug water wells were used extensively in tribal and non-tribal areas. In many cases, the old hand-dug wells are unsecured, unseen, and forgotten. The injury hazards to children were initially highlighted in Taos Pueblo when a child fell into an open hand-dug well located inside an abandoned home and fatality was narrowly avoided. A collaborative pilot project was undertaken, and the DEHS developed tools for recording the well sites. Also, Sanitation Facilities Construction developed the backfilling criteria for well decommission. More than 20 wells have been located and documented, and a few of the wells were decommissioned. Collaboration continues to coordinate field activities, including abatement, at these additional sites. The initiative may serve as a model for other communities and jurisdictions for addressing the potential hazards of these forgotten features.

SAFE DRINKING WATER

The DEHS is responsible for ensuring safe drinking water for AI/AN people. The DEHS is responsible for ensuring environmental health settings for AI/AN people are safe and ultimately provide a healthy environment in which to live. Environmental health issues associated with drinking water can be caused by organisms or contaminants that are directly spread through water and are an ever-present risk to human health. Examples of waterborne illnesses include Giardiasis, Shigellosis, Cryptosporidiosis, lead poisoning, and copper toxicity. Annually, DEHS staff report approximately 300 activities related to drinking water.

In 2011, many effective programs focused on reducing the risk factors related to waterborne illness. Some DEHS staff focused on eliminating risk factors related to unsafe or insufficient water supply and the operation and maintenance of existing individual and community systems. Specifically:

- The Oklahoma City Area addressed drinking water issues at the Kickapoo Tribe of Oklahoma New Land site. Port-a-potties and water buffalos were most commonly used by the new occupants of the property, and the health of the occupants on the New Land was at risk. The New Land water line loop was modified into an existing American Recovery and Reinvestment Act project for the water line extension to provide potable water to the occupants of the New Land. The Shawnee Field Office of Environmental Health Sanitation Facilities Construction connected all occupants to potable water and individual on-site wastewater systems. Team efforts and communication among the Shawnee Field Office of Environmental Health and Engineering have contributed to improved public health on the New Land property. Kickapoo Tribal members are now enjoying potable water and safely disposing of wastewater on the New Land;
- Seasonal flooding of the Kuskokwim River resulted in a partial evacuation of the Village of Crooked Creek in the spring of 2011 to a nearby mining camp. The Yukon-Kuskokwim Office (YKHC) helped organize a multidisciplinary response team. YKHC staff arranged for and conducted a rapid needs assessment and preventive health education. The staff also coordinated the delivery of essential supplies. The Environmental Health Services (EHS) staff and Remote Maintenance Workers (RMWs) oversaw the proper disinfection or closeout of affected pit latrines, and coordinated residential well monitoring and disinfection. Because of YKHC's outstanding response, no additional state or federal health and medical personnel were required, and no injuries, illnesses, or deaths were reported as a result of the flood. The YKHC response was recognized by the Alaska Public Health Association 2011 Short-Term Service Award;
- The YKHC routinely responds to community water system emergencies. In the winter of 2010, the RMW program invested over 350 man-hours in emergency response assistance to Chefornak. EHS staff developed a hazard vulnerability analysis tool to objectively identify hazardous conditions throughout water and sewer systems and to quantify the risk of catastrophic failure. The program is working with communities to address system components at greatest risk of failure. This new tool also helps EHS staff to quantify the impact of their work; and

- California Area DEHS initiated a safe drinking water project with the Picayune Rancheria of the Chukchansi Indians in Central California. This project was established to assess the impact of mining and agricultural practices on privately owned water well systems. Quarterly bacteriological and chemical water well samples were collected and analyzed to identify possible contaminants. Also, statistical analyses of contaminant levels to determine contaminants of significance were conducted. Public education and awareness activities about the importance of protecting individual safe drinking water supplies were provided to community members.

FOOD SAFETY

DEHS staff provide services at more than 5,000 food service facilities across the country. The Centers for Disease Control and Prevention (CDC) estimates that for the entire United States, over 48 million cases of foodborne illness occur, 128,000 of which require hospitalization and 3,000 of which are fatal (CDC, 2011, *Food Safety*. Retrieved April 25, 2012, from http://www.cdc.gov/foodborneburden/2011-foodborne-estimates.html). Organisms that result in common foodborne illnesses include *Salmonella enterica*, *Escherichia coli* O157:H7, Norovirus, *Listeria monocytogenes*, *Staphylococcus aureus*, and *Clostridium perfringens*.

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 are the same violation that has 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 members work to persuade tribal councils to pass food code legislation, whereas others focus on eliminating specific deficiencies (temperature control, hand washing, and/or employee health).

Implementation of effective environmental health and injury prevention strategies can substantially reduce disease and injury rates. For instance, from 2001 to 2009, as the number of services provided by IHS to food service establishments and drinking water systems went up, the incidence of food and waterborne diseases decreased (see Figure 7).

An example of an effective initiative was the Oklahoma City Area (OKC) International Food Protection Training Institute (IFPTI) Food Safety Fellowship. The Fellowship Program is designed to provide the selected Fellows from all areas of food protection with a professional development experience. This experience focused on critical thinking, problem-solving, and decision making skills – all within the framework of food regulatory science, law, and policy. Aaron McNeill was selected to attend the fellowship. Throughout the Fellowship Program, he was working with experienced experts in the food protection field and state food protection officials from across the country.

During the course of the Fellowship Program, a research project was conducted regarding the impact of having an adopted food code on the level of compliance with the Food and Drug Administration (FDA) foodborne illness risk factors. Four tribes within the OKC, including two that have adopted the FDA Model Food Code, were selected for this project. This project was needed because only 8% of the food establishments located on Indian lands within the Service Area have adopted and implemented the FDA Model Food Code. The research project attempted to compare food safety risk factor violations in food service establishments having an adopted food code with those that have not implemented any form of the FDA Model Food Code. The timeframe for the comparable date was January 2010 through October 2011.

Upon completion of the research project, it was discovered that there were a significantly higher number of risk factor violations for the tribal food service operations that do not have an adopted FDA Model Food Code. The risk factor with the highest percentage of violations

was improper holding temperatures. Improper holding temperatures contributed to 46% of the total violations documented during the project timeframe. Over the course of the year, food from unsafe sources and inadequate cooking temperatures had the least amount of documented violations for all facility types and groups.

For the tribal food service operations evaluated in the project, the data concluded that there were a greater number of documented food safety risk factor violations for tribal food service operations not having an adopted FDA Model Food Code. The number of food safety risk factor violations was also more prevalent in food establishments operating without an FDA Model Food Code. The data support the adoption or implementation of an FDA Model Food Code as a tool to reduce food safety risk factors associated with foodborne illness. The adoption of the FDA Model Food Code by all food safety agencies at the federal, state, local, and tribal levels establishes a sound regulatory foundation and legal framework for uniformity in achieving such a reduction.

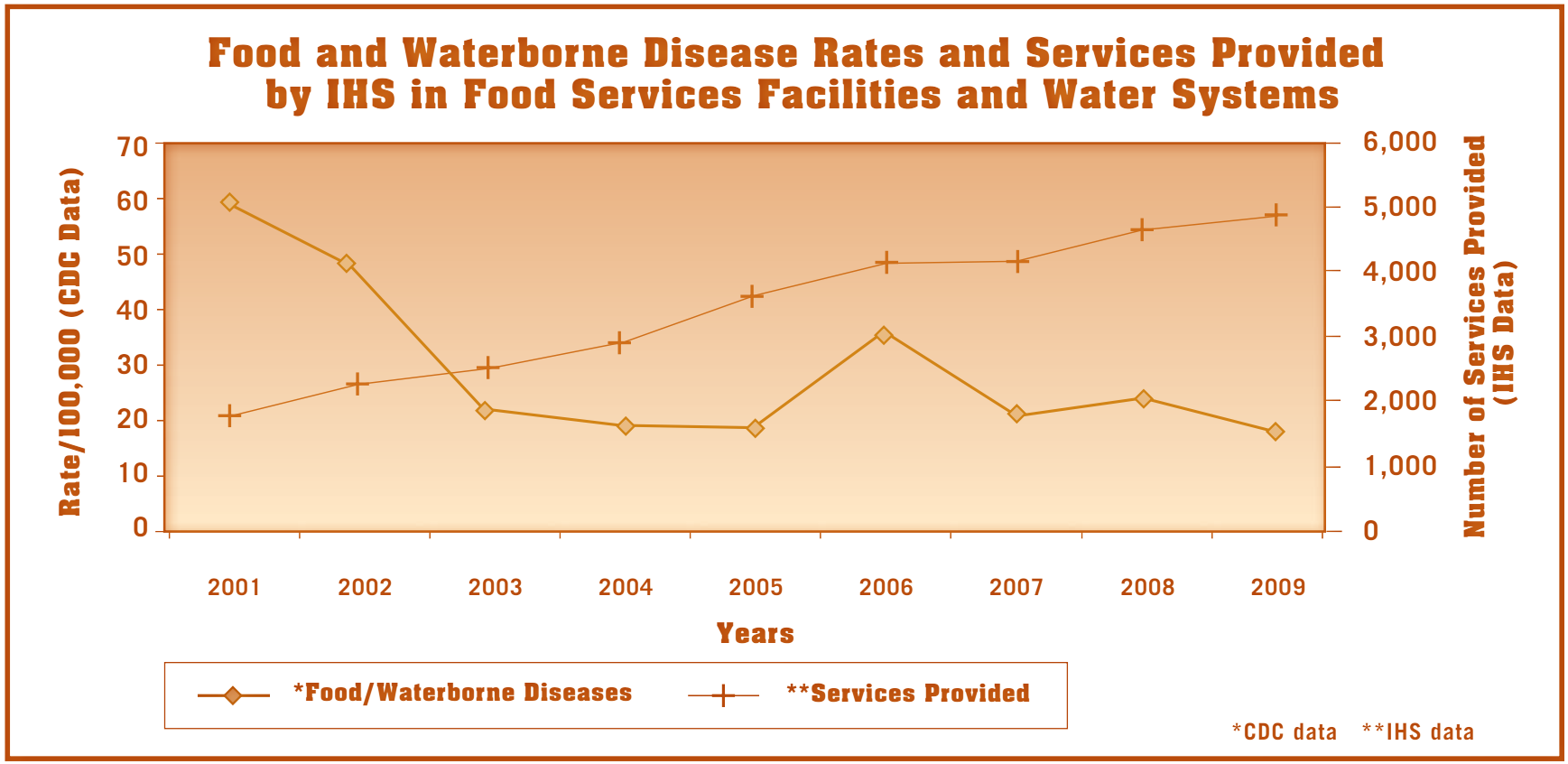


Figure 7: Trends in services and reportable food and waterborne diseases

VECTORBORNE AND COMMUNICABLE DISEASES

Environmental health issues associated with 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, H1N1, Hantavirus, Rocky Mountain Spotted Fever (RMSF), and Plague.

DEHS staff focused on the elimination of risk factors through identifying H5N1 in bird populations; conducting spay, neuter, and rabies clinics for dogs and cats; and investigating prairie dog die-offs to prevent human Plague cases. Specifically:

- The Tucson Area began responding to a declared outbreak of RMSF in the fall of 2011. Efforts resulting in a comprehensive multidisciplinary response began immediately after the index case was diagnosed. Along with chart reviews to determine whether previous cases had been missed and physician education for medical intervention, the necessary tools and education to tribal and IHS personnel were provided to contain the spread of this serious tickborne illness. With CDC partners, educational activities were conducted with the RMSF Task Force; supplies to treat animals were provided; and pesticides to protect occupants and pets from ticks around homes were distributed. A dog serosurvey was conducted to gauge the prevalence of the illness within the canine population, and targeted interventions were conducted at the areas showing the highest levels of prevalence. Public service announcements to educate people about the risk and how to conduct tick checks and protect their families are an important part of this ongoing effort. A search for funding to maintain the effort has also been an important part of the response. Because this is not a one-time effort, treatments must continue on a quarterly basis. Efforts have been successful in preventing a larger scale outbreak, and tick trapping at IHS facilities and at select homes continues to monitor tick populations;

- The Phoenix Area conducted a multifaceted campaign against rabies. The EHS team focused on the following objectives: (1) providing advanced training to tribal stakeholders; (2) providing additional rabies vaccination and spay/neuter services to the tribes; and (3) coordinating clear and prompt animal exposure referral. The advanced training was provided to over 50% (7/13) of tribes served in the Western Arizona District. Approximately 50 tribal stakeholders have completed the advanced 2-day training. Increased marketing of services and outreach in 2011 resulted in 15 rabies vaccination clinics in the Western Arizona District that yielded an estimated 1,600 animals. One service unit that had not received vaccination services since 2009 yielded its highest totals to date last year with 300 animals vaccinated. The improved bite referral forms and the accompanying training provided to the referring entities have resulted in timely and efficient follow-up investigations. Additionally, all investigations are now closed out with an official letter sent to each bite victim with additional steps, if any, they need to take based on the condition and disposition of the animal that bit the individual. (For example, no post-exposure prophylaxis was recommended if the animal was found and vaccine records were valid and verified or the animal showed no symptoms of rabies after quarantine phase. Post-exposure prophylaxis was recommended if the animal involved showed signs of rabies and was not located or available for lab testing); and
- The Phoenix Area conducted an RMSF Prevention Initiative. Through 2011, there were over 200 reported cases of human RMSF and more than 14 deaths. Nationally, the estimated annual incidence of RMSF is around seven cases per million persons. This region's reported incidence is 70 times the national incidence, and the region's case fatality rate is 20 times the national average. The DEHS has been heavily involved with RMSF prevention activities alongside multiple tribal, state, and federal agencies. The DEHS conducted the first-ever comprehensive dog population survey on two Arizona reservations. This project, led by the CDC, revealed the following: total dog population was estimated at 5,011; 44.3% of homes had dogs; there were 0.96 dogs per home; and 73.7% of dogs were free roaming. These data are to be used as a baseline to determine the effectiveness of future efforts for dog and tick control and RMSF prevention initiatives. The DEHS also collaborated with the CDC to implement a 12-month assessment of tick population dynamics to understand and define periods of time when residential application of pesticides would be the most efficient in killing brown dog ticks. This study continues into 2012.

HEALTHY HOMES

Environmental health issues associated with housing on tribal lands present an ever-increasing set of complex challenges to be addressed. A few examples of environmental health-related issues of concern are as follows: lead exposure, asbestos exposure, mold, 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 critical and repeat violations that are threats to the health of occupants. Critical violations are issues that are identified during inspections that need to be corrected immediately, and repeat violations are the same violation that has occurred in more than one consecutive home inspection. DEHS staff focus on identifying and eliminating risk factors related to fire safety, asthma triggers, lead-based paint, and chemical exposure, as well as chronic and acute exposure to mold and moisture. Specifically:

- The Albuquerque Area DEHS created new partnerships with the Environmental Protection Agency (EPA) and the Department of Housing and Urban Development (HUD) to offer Montana State University's "Tribal Healthy Homes" course at the Albuquerque Area Office's Southern Colorado Ute Service Unit (SCUSU). From this alignment of partners, the Southern Colorado Ute Service Unit Tribal Healthy Homes Project (SCUSU-THHP) was created and included the successful facilitation of the Southern Ute Tribe's efforts toward Healthy Homes action planning. The "Tribal Healthy Homes" course was funded through the American Recovery and Reinvestment Act of 2009 and aligns with President Obama's Energy Initiative;
- In the Bemidji Area, as part of a partnership with the Leech Lake Green Team's community composting project, the White Earth Field EHS attended/facilitated tribal staff and community composting classes at the Leech Lake Palace Casino (35 attendees) and the Leech Lake Tribal College (2 sessions; 30 participants). The purpose of these classes was to train tribal employees in the management of the composting facilities and to provide education to community members in how to compost and market the community compost systems. This project is expected to reduce solid waste disposal costs for the tribe and reduce greenhouse gas generation, and provide compost for their enterprises and, ultimately, for community members. The White Earth Field EHS has also taken the lead in a DEHS office recycling/composting program;
- In the Phoenix Area, disposal of household wastewater by dumping it on the ground on the Hopi Reservation from the lack of indoor plumbing in several traditional homes located adjacent to ceremonial sites presents obvious public health risks. Therefore, DEHS staff conducted a door-to-door survey in one village to evaluate community support for the installation of a wastewater dump station and to determine preferred locations for it. They also evaluated community support for one and determined who should enforce it. Of the 255 community members asked to participate, 84% agreed. Most community members surveyed (86%) were concerned about

wastewater disposal. Overall, there was considerable community support (99%) for the installation of a dump station, and 98% of residents indicated they would use a dump station. Those surveyed thought there should be an ordinance to enforce wastewater management (85%) with enforcement responsibility delegated to community members (47%) or community leaders (43%). Village leaders and the Office of Environmental Health and Engineering continue to pursue the installation of a dump station. They have selected two potential dump station sites and Sanitation Facilities Construction plans to allocate funds for design and construction. Work continues on the establishment of an ordinance;

- The Alaska Native Tribal Health Consortium DEHS sought and secured funding from the Commission for Environmental Cooperation (CEC), an entity formed by sub-accord of the North American Free

Trade Agreement. This funding is to be used to investigate the relationship between indoor air quality and children's respiratory health and then address the problem in a subset of Alaska Native homes. The primary aim of the study is to determine whether light home remediation activities and occupant education reduce the need for respiratory medical care among a high-risk group of Alaska Native children. A secondary aim is to develop a model for addressing respiratory disease through home modification that can be replicated in other regions of Alaska, along with indigenous areas of Canada and Mexico. In the winter of 2011, EHS partnered with the Yukon-Kuskokwim Health Corporation to select 15 homes in 2 Western Alaska communities to participate in the study's pilot year. During the initial air monitoring visit, families were excited to learn about the data being gathered and were engaged in the air monitoring process. Ongoing surveillance of the participating children's lung health will allow for evaluation of the effectiveness of this intervention. The overarching goal in the CEC Healthy Homes study is to improve indoor air quality and reduce the number of respiratory illnesses (and trips to receive treatment) in high-risk children through home interventions and education;

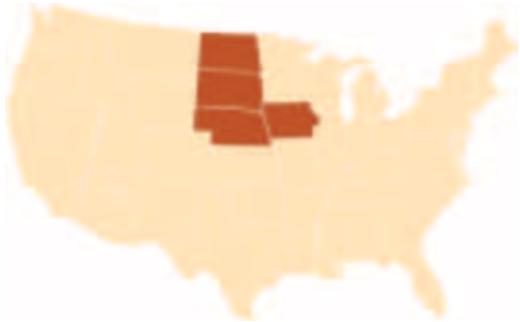
- In the Oklahoma City Area, a visual training aid for homeowners was proposed and was developed to be used in conjunction with written information currently contained in a bound homeowner manual. "How to Care for Your Sanitation Systems" is an educational video produced by IHS and contractors to supplement the homeowner manual. This video is an easy reference for homeowners about the maintenance and upkeep of newly installed individual on-site water and/or wastewater systems. Many DEHS staff were instrumental in the contract oversight, development, and scripting and narration of the video. This video on DVD effectively describes precautions and troubleshooting for individual on-site water and wastewater systems used within the Oklahoma City Area. When available and used by the homeowner,

the information captured on the DVD, along with an effective educational effort for the homeowners, will contribute toward maximizing the life expectancy of the systems and reduce the number of maintenance and complaint calls to the Sanitation Facilities Construction Field Offices. In turn, crews will be able to focus less on complaints and more on planning and projects. Homeowners have more independence and understanding of their new individual on-site water and/or wastewater systems; and

- The Portland Area managed an environmental management program capacity building project. The DEHS partnered with the Yakama Nation Environmental Management Program (YNEMP) after a severe wind storm spread a home chimney fire into an uncontained wildfire on February 12, 2011. The fire destroyed 20 homes, displaced approximately 120 people, and left over 75 of them homeless. It interrupted the provision of public utilities; limited access to public facilities; and caused extensive wind, fire, and smoke damage to homes, businesses, public utilities, public facilities, and infrastructure. The DEHS committed to providing technical assistance to include defining open wellheads left by the destruction of homes; identifying breaks in water supply lines; identifying areas that could contain hazardous or toxic substances during salvage activities of homeowners, negating exposure to identified hazardous materials through proper collection and disposal; and protecting children attending the Tribal Head Start Program. The DEHS and YNEMP developed relationships between the EPA Region 10 Emergency Response Team, Washington State Spill Response Team, and Yakima County during the combined response to the White Swan Fire, thereby resulting in enhancing the overall efficiency to emergency response to disasters occurring on the reservation in the future.

Area DEHS Programs

Aberdeen



ABERDEEN AREA

The Aberdeen Area IHS encompasses 18 tribes in 4 states (Iowa, Nebraska, North Dakota, and South Dakota) totaling 281,459 square miles. The Aberdeen Area is the fifth largest in IHS, with 2,139 facilities and a user population of 121,903 American Indians. Environmental Health Services (EHS) is one of three divisions (EHS, Sanitation Facilities Construction, and Facilities Management) within the Aberdeen Area Office of Environmental Health and Engineering (OEHE). The most valuable asset within the Aberdeen Area DEHS is its staff. The Aberdeen Area DEHS comprises career tribal employees, federal civil service, and U.S. Public Health Service (PHS) Commissioned Corps Officers. At the Area level, Aberdeen has a DEHS Director, an Area Injury Prevention Specialist, and an Institutional Environmental Health Officer (EHO). At the district level, this Area has District Environmental Health staff located in Minot, North Dakota; Pierre, South Dakota; and Sioux City, Iowa. At the field level, the Aberdeen Area DEHS staffs 14 offices with Field Environmental Health Specialists and Injury Prevention Specialists. Seven of the field offices are contracted programs and managed by the tribe. The other seven offices are direct service programs and staffed with Civil Service or PHS Commissioned Corps staff. DEHS district and field staff are responsible for providing surveys, technical assistance, and investigations at general environmental health facilities listed in WebEHRS. The remaining facilities are covered by the Institutional EHO. District and field staff spend approximately 60% of their time working on general environmental health issues and 40% of their time engaged in community injury prevention activities.

Injury prevention is a primary focus area for the Program because of the significant impact it has on the communities. For example, Aberdeen Area American Indian children (birth to 6 years of age) suffer a fire death rate three times higher than white children and a motor vehicle death rate seven times higher than white children. The health impact and the health disparity are clear. One way the tribes and the Aberdeen Area DEHS Program are working to address these two concerns is to partner with the IHS Head Start, the IHS Community Injury Prevention Program, and the U.S. Fire Administration.

Alaska

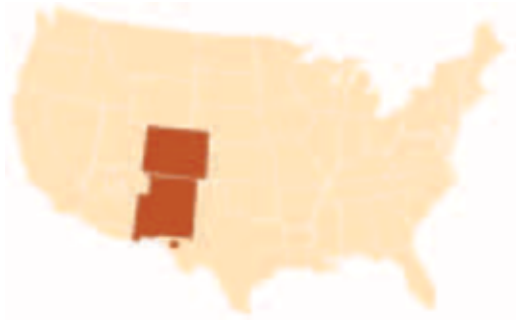
ALASKA AREA

Environmental health 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 environmental health programs serve a specific geographical area. These organizations include the South East Alaska Regional Health Consortium (Sitka), 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).

These regionally based health organizations provide a full suite of basic consultative environmental health services for the communities and tribes in their respective regions. Typical services include assistance related to water, sewer, solid waste, air, and vector control activities. Other services include disease outbreak investigations and support for community-based clinics related to infection control and safety, as well as injury prevention efforts. Additionally, several of the tribal environmental health programs run 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.

ANTHC's environmental health program offers services and support on a statewide basis that are not normally available from the regional environmental health programs. For example, ANTHC provides institutional environmental health services and industrial hygiene support. ANTHC also provides environmental health research, water use promotion, and program consultation activities. The regional environmental health programs, together with ANTHC, offer communities and tribes a comprehensive set of environmental health services that protect and enhance the well-being of Alaska Natives and American Indians.

Albuquerque



ALBUQUERQUE AREA

The Albuquerque Area DEHS Program serves 27 distinctly different, federally recognized tribes in Colorado, New Mexico, Texas, and Utah. The Area's service population of over 100,000 members comprises 20 Pueblos, 3 Navajo Nation Chapters, 2 Apache Reservations, and 2 Ute Reservations. Environmental health services were first delivered in the Albuquerque Area around 1955 through the efforts of an Engineer and Environmental Health Technicians (EHTs). Program staffing was expanded to include other specialists after the more formal establishment of the DEHS Program. The current services offered to local tribes include the traditional environmental health essential services of the original DEHS Program, as well as new services. Those tribes who have entered into Public Law 93-638 (as amended) contract agreements are provided administrative and technical advice, and "buy-back environmental health services" are available upon request.

Services are performed across the Area by EHS professionals detailed to the Area Office and the six service units. Professional positions include a Director, District Supervising Environmental Health Officers (EHOs), a Supervising EHO, Service Unit EHOs, Injury Prevention Specialists, Safety Officers, an Industrial Hygiene and Safety Manager, an Institutional EHO, and EHTs. It should be noted that the Area has implemented program standards, and the majority of the staff have undergone training and performed surveys in order to complete the Food and Drug Administration's Voluntary National Retail Food Regulatory Program Standards Certification.

The Albuquerque Area's Emergency Management Program is also housed within the DEHS Program. Its staff undergo continuous training for these roles, performing at a level that includes skills qualifying for special certifications, such as the the Federal Emergency Management Agency (FEMA) Professional Continuity Practitioner Certification. Services are provided internally and externally, and community outreach activities are ongoing. Service also includes management of an Area-wide satellite telephone emergency management communication program.

The DEHS staff also partner with the following three divisions: (1) Sanitation Facilities Construction for surveys of water, wastewater, and solid waste systems; (2) Health Facilities for health facility plan reviews and equipment installation compliance; and (3) Clinical Quality – the Public Health Nursing Program for case management of elevated blood lead levels in children, for injury prevention efforts, and for mock facility accreditation surveys. External partnerships include local, state, and federal DEHS collaborative projects, investigations, and mutual aid. The staff often participate in national program work; they support the Environmental Health Support Center Training Team and other DEHS Programs in course development, participate as course trainers, and/or sponsor national EHS training for their peers and for tribal members.

The Albuquerque Area DEHS Program strength is in its staff's commitment to continuous program and self-improvement and in collaborative partnerships.

Bemidji

BEMIDJI AREA

The Bemidji Area Indian Health Service (BAIHS) serves 34 tribes occupying an area covering 5,183 square miles. Approximately 100,000 American Indians live within the BAIHS Service Area covering three states: Michigan, Minnesota, and Wisconsin. There are two district offices within the Area: Minnesota (Bemidji) and Rhinelander, Wisconsin. IHS DEHS staff include six field Environmental Health Specialists (EHSs), two District EHSs, one DEHS Director, and one Area Institutional EHS. IHS DEHS staff provide field services to 19 tribes; tribal EHSs provide field services to 15 tribes.

The Bemidji Area provides environmental health (EH) services (i.e., training, investigations, and surveys) to improve food safety; solid and liquid waste management; water quality; hazard communication; epidemiology; vector control; recreation/celebration sanitation; indoor/outdoor air quality; home sanitation and safety; Head Start, daycare, and school issues; and training. The DEHS is also responsible for specialized services in community injury prevention and institutional environmental health.

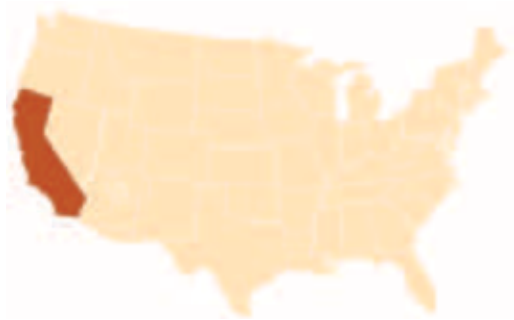
The Bemidji Area emphasizes: (1) preventing pollution and reducing resource depletion and (2) partnering with tribes in building community resilience by localizing food and energy systems. These "sustainability" aspects of environmental health have become a priority because of scientific consensus. BAIHS realizes a future scenario in which climate change, environmental degradation, pollution, and resource depletion will significantly impact the public's health – and, the practice of environmental public health. Because Bemidji believes this will become one of the greatest challenges facing the future of their DEHS Program – and tribal communities – they strive for a more holistic practice of environmental public health.

Billings

BILLINGS AREA

The Billings Area IHS serves 9 tribes (totaling 70,000 people) on 8 reservations throughout Montana and Wyoming. The Billings DEHS Program employs five staff, two work at the Area Office, one as a staff Injury Prevention Specialist and the other as an Environmental Health Specialist, and three work part time in both environmental health and community injury prevention. Eight staff work in field operations and one works in community injury prevention. Two federal staff members and one tribal staff member are registered in environmental health. Four federal staff have completed the IHS Injury Prevention Fellowship Program, and three have a master's degree.

California



CALIFORNIA AREA

The California Area DEHS serves approximately 104 federally recognized tribal governments representing a service population of 87,950 persons, in over 1,550 facilities, in the State of California.

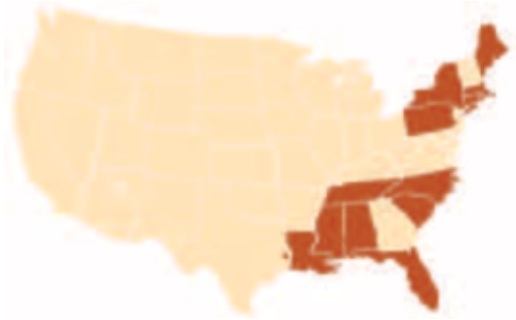
Environmental Health Specialists perform the work of the DEHS. Staff provide services to tribes at duty sites in the Area Office, two district offices, and one field office. All DEHS staff have a bachelor's degree in environmental health or a related discipline.

The California DEHS Program addresses a variety of areas, including, but not limited to, food sanitation, hazardous waste, home sanitation and safety, indoor air quality, solid waste management, vector control, wastewater, and water quality. The services provided to California American Indian Tribes consist of investigations, surveys, technical assistance, training, and sampling and testing.

Specialists in the Injury Prevention Program provide tribes with additional services that aim to address community injuries (e.g., motor vehicle injuries, fire/burn injuries, and elder falls). The mission of the program is to decrease the incidence of severe injuries and death to the lowest possible level and increase the capacity of tribes to address their injury problems. The program currently provides technical assistance to tribes with injury data collection, development and implementation of interventions or projects based on best practices, and training.

Specialists in the Institutional Environmental Health Program are responsible for providing additional services to tribal health programs and community institutional facilities such as Head Start Centers, daycare centers, schools, youth facilities, and substance abuse centers. The services currently provided by this program consist of training, safety program development, accreditation support, radiation protection, risk assessments, industrial hygiene, policy development, and Occupational Safety and Health Administration (OSHA) compliance.

Nashville



NASHVILLE AREA

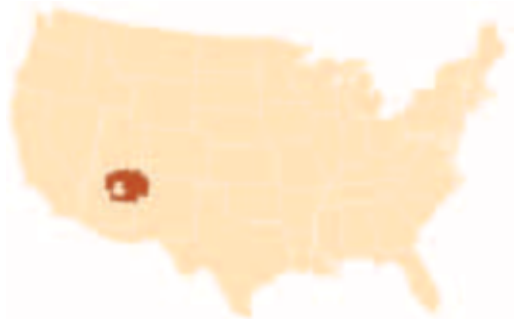
Nashville Area Indian Health Service (NAIHS) serves 29 tribes and an American Indian population of approximately 48,000. Thirteen states are covered by the NAIHS: Alabama, Connecticut, Florida, Louisiana, Maine, Massachusetts, Mississippi, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, and Texas. Currently, NAIHS DEHS staff include one Director and one General Environmental Health Specialist.

The NAIHS DEHS provides environmental health training courses that train both federal and tribal employees in the FDA Food Code, hazard communications/bloodborne pathogens, and WebCident. Annual surveys of numerous facilities, including casinos, hotels, pools, food service venues, and healthcare facilities (including x-ray equipment surveys), are also completed. The Area will be hiring another Environmental Health Specialist in the next year so that it can continue to provide comprehensive services to Area Tribes.

The Area Institutional Officer is part of a comprehensive team who conduct Joint Commission (JC) and Accreditation Association of Ambulatory Health Care (AAAHC) mock surveys to ensure federal facilities are ready for accreditation. All Area federal facilities have received and maintained accreditation.

The General Environmental Health Officer is also the Project Manager for injury prevention grants. He is currently assisting the St. Regis Mohawk Tribe and the Chitimacha Tribe of Louisiana.

Navajo



NAVAJO AREA

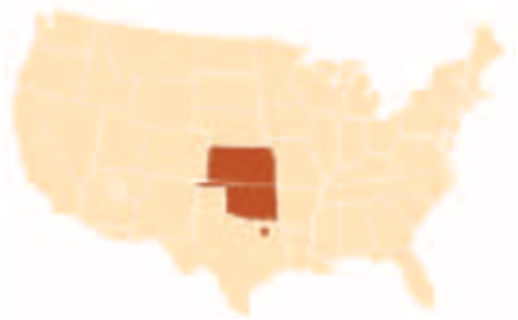
The Navajo Area DEHS is responsible for the delivery of services to American Indians in portions of the States of Arizona, New Mexico, and Utah (a region known as the 4-Corners Area of the United States). The DEHS is primarily responsible for services to approximately 250,000 members of the Navajo Nation and Southern Band of San Juan Paiutes. The Navajo Nation is the largest Indian Tribe in the United States. It has the largest reservation, which encompasses more than 25,000 square miles in Colorado, northeast Arizona, northwest New Mexico, and southern Utah, with three satellite locations in central New Mexico.

A comprehensive environmental health program is provided by the Navajo Area DEHS. Additional specialized services are also provided by the Community Injury Prevention Program and by the Division of Occupational Health and Safety Management. The DEHS is centered at the Navajo Area Office located in Window Rock, Arizona; three district offices located in Fort Defiance, Arizona, Shiprock, New Mexico, and Gallup, New Mexico; and three service unit field offices located in Kayenta, Arizona, Many Farms, Arizona, and Crownpoint, New Mexico. Our professional, technical, and clerical staff members work as a team to promote a healthy environment across the Navajo Nation.

In addition to the service areas covered by the DEHS, three healthcare corporations authorized by the Navajo Nation provide similar environmental health services. DEHS staff members plan and implement an environmental health and safety program with emphasis on food protection, prevention of motor vehicle crashes and falls, institutional environmental health, emergency preparedness, water and sewer sanitation, and prevention of zoonotic diseases including Plague, Rabies, Hantavirus, and West Nile Virus. DEHS staff also provide injury prevention training, food handler courses, and communicable disease prevention training to community and facility staff. In addition to field responsibilities, staff members participate on various facility and community committees.

Part of the Navajo Area DEHS Food Program is implemented by the Navajo Tribe, which operates the Navajo Division of Health in Window Rock, Arizona. The Navajo Nation provides inspection services, food handler training, and enforcement action for retail and itinerant food services on the reservation.

Oklahoma City



OKLAHOMA CITY AREA

The Oklahoma City Area IHS currently serves 43 tribes with a service population of nearly 330,000 American Indian or Alaska Native (AI/AN) people. The service area covers the States of Kansas, Oklahoma, and Texas. The DEHS has two district offices in Okmulgee and Shawnee, Oklahoma, and four field offices located in Oklahoma (Clinton, Lawton, Miami, and Pawnee) and one in Holton, Kansas.

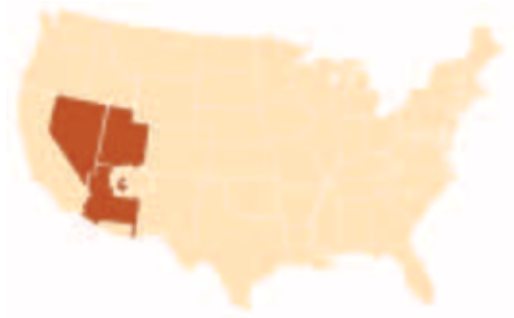
The Area's workforce comprises six PHS Commissioned Officers and four federal civil service Environmental Health Officers (EHOs), who all have graduated from accredited environmental science universities and have obtained Oklahoma and National Environmental Health Association credentials. They have received extensive education and training in conducting health, safety, and food service surveys. All have received FDA Procedures for Standardization and Certification of Retail Food Inspection training.

The Oklahoma City Area DEHS Program provides environmental health services that address elements such as food sanitation; solid and liquid waste management; water quality; hazard communication; epidemiology; vector control; emergency response; recreation/celebration sanitation; indoor/outdoor air quality; home sanitation and safety; Head Start, daycare, and school issues; and training. The DEHS is also responsible for specialized services in community injury prevention and institutional environmental health.

The purpose of the Community Injury Prevention Program is to reduce the incidence and severity of injury among American Indians. Program objectives are met by conducting injury surveillance surveys and by identifying problem areas that can be solved through direct intervention and through community activities.

The Institutional Environmental Health Program assists healthcare facilities in providing a safe environment for patients, visitors, and staff. The Institutional EHO provides direct technical assistance to safety committees, infection control committees, facilities management, and others. In addition, the Institutional EHO is responsible for conducting annual radiation protection surveys of all x-ray equipment to ensure that there is no unnecessary exposure to radiation and for conducting other industrial hygiene activities in those facilities.

Phoenix



PHOENIX AREA

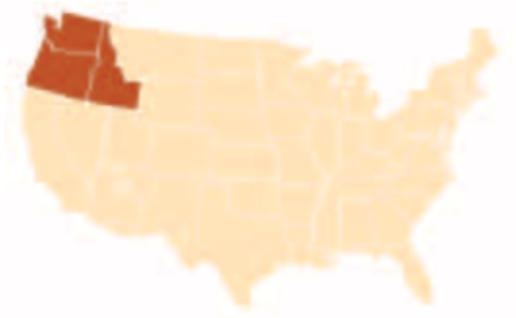
The Phoenix Area IHS DEHS serves 46 tribes/tribal organizations with a combined population of nearly 150,000 and over 2,000 facilities in 4 states (Arizona, California, Nevada, and Utah). A cadre of Environmental Health Officers/Sanitarians accomplishes the work of the DEHS. The staff are located in the Area Office; three district offices; and nine service units/field offices. The skills and competencies of our staff are illustrated by their all having bachelor's degrees in Environmental Health or a related field, nearly half having advanced graduate degrees, and almost all having professional credentials (RS or REHS).

The Environmental Health (EH) program provides a breadth of technical and consultation services that include facility hazard assessments, policy development, investigations, and training. The diverse technical scope of the program includes food sanitation, vector control, water quality, waste management, air quality, infection control, and occupational safety. Recent staff work has led to accomplishments in response to a Rocky Mountain Spotted Fever epidemic, reduction in lead poisoning risk among school children, and establishment of a comprehensive tribal animal control program. Specialized services are provided in institutional environmental health and community injury prevention.

The Institutional Environmental Health (IEH) Specialists within the EH Program provide industrial hygiene services, accreditation consultation, and a variety of safety training to the IHS and tribal healthcare facilities. The program values close mentorship of new Safety Officers on fire safety, hazardous materials, security, and safety program management. The IEH team also provides technical support to DEHS staff consulting on community institutions such as childcare centers, correctional facilities, and schools. As the Phoenix Area Emergency Management Point of Contact (EMPOC), the program ties tribal communities and IHS healthcare facilities into the resources of the national response framework and coordinates a network-wide response to local disasters (i.e., flooding, forest fires, and mass vaccination).

The Injury Prevention (IP) Specialists within the EH Program place a priority on epidemiology, training, partnership building, and the development of proven intervention strategies to reduce the risk of death and disability from injuries. Staff provide public health expertise in the prevention of both unintentional injury (i.e., motor vehicle crashes and falls) and intentional injury (i.e., suicide and assaults). Mini-projects, funded through the IP Program, currently support suicide prevention initiatives and elder fall prevention projects. In addition to technical assistance, close mentoring is provided to three Tribal IP Programs funded by a multi-year IHS cooperative agreement.

Portland



PORTLAND AREA

The Portland Area IHS provides a health system for an estimated 150,000 Indian residents of the 43 federally recognized tribes located in Idaho, Oregon, and Washington. Health delivery services are provided by a mix of health centers, health stations, preventive health programs, and urban programs.

In addition, the Northwest Portland Area Indian Health Board (http://www.npaihb.org) works closely with the Portland Area Office, operating a variety of important health-related programs on behalf of their member tribes including the Northwest Tribal Epidemiology Center.

The Portland Area DEHS Program works in partnership with tribes and other organizations/agencies to implement the following: monitor and assess environmental hazards and conditions in AI/AN homes, institutions, and communities; educate and inform residents about environmental health issues; develop policies for addressing environmental health and injury concerns; evaluate programs, plans, and projects; and conduct projects and studies to determine best practices and solutions to environmental public health problems. The outcomes and impacts of these services include controlling and preventing environmentally related disease and injury, and improving personal and overall community wellness. The Portland Area program is aligned with the IHS national strategic initiatives and priorities of children's environment, safe drinking water, food safety, communicable and vectorborne diseases, and healthy homes, as well as the specialty services in community injury prevention and institutional environmental health. The Portland Area DEHS Program has enhanced services in Pesticide Management and Underground Storage Tank/Leaking Underground Storage Tank Monitoring through interagency agreements with EPA Region X.

In the Portland Area, many tribes have assumed all or a portion of the DEHS Program under the authority of the Indian Self-Determination and Education Assistance Act (Public Law 93-638, as amended). The direct service tribes are provided services through a DEHS Director and Institutional Environmental Health Officer at the Area Office as well as environmental health positions in district and field offices. This organizational structure maximizes the delivery of services to 24 tribes and community injury prevention to 22 tribes. The Portland Area DEHS Director also serves as the Area Emergency Management Coordinator, providing services in emergency preparedness and response, continuity of operations planning, deployment coordination, and physical security.

Tucson

TUCSON AREA

The Tucson Area Indian Health Service (TAIHS) developed out of an effort to curb tuberculosis outbreaks among Indian communities in the very early 1930s. After the Indian Oasis Papago Hospital in Sells was destroyed by fire in 1947, the Papago Indian Sanatorium was converted into a hospital and then in 1965 into an outpatient clinic. The sanatorium continues to serve the San Xavier Indian community and other tribally enrolled members. In 1964, the 34-bed PHS Sells Indian Hospital was constructed to serve the needs of the then Papago Tribe, known since 1986 as the Tohono O'odham Nation. Eventually, the concept of operations formalized into the Office of Health Programs and Research and Development and then into the present-day Tucson Area IHS in 2000.

Today, the TAIHS serves two Tribes: The Tohono O'odham Nation and the Pascua Yaqui Tribe of Arizona. The total land base equates to nearly 3.2 million acres, an area about the size of the State of Connecticut. The Tohono O'odham Nation's southernmost boundary shares 62 miles of contiguous boundary with Mexico. The Tohono O'odham Nation has approximately 31,000 enrolled members, and the Pascua Yaqui Tribe has approximately 18,000 enrolled members. The Tohono O'odham are predominately direct service, and no environmental health activities have been contracted. The Pascua Yaqui have compacted and contracted the majority of their services, a notable exception being environmental health. Casino and hotel operations are the economic development engines for both tribes and the Environmental Health Services Branch (EHSB) personnel provide staff training, education, and food service surveys for these and other tribal facilities. The EHSB provides environmental health services in an effort to raise the tribes' health status to the highest level, utilizing the Ten Essential Public Health Services and the Mission Statement as guiding ideals.

Looking Ahead into 2012

For 2012, the DEHS looks forward to accomplishing the following:

- Revisit the strategic plan and develop new Vision Elements;
- Fully implement the new WebEHRS system;
- Complete reviews of area programs against performance standards and provide feedback on how to enhance services;
- Continue with the U.S.-Canadian Environmental Health Officer Staff Exchange and improve IHS participation;
- Develop and use a competency assessment tool to measure staff effectiveness in Institutional Environmental Health roles;
- Continue to enhance capacity of tribal injury prevention programs in developing and managing effective community-based programs through support of TIPCAP and the IHS Ride Safe and Sleep Safe Programs;
- Create a new chapter in the Indian Health Manual that clarifies roles and responsibilities of IHS staff in environmental sustainability and improves communication among stakeholders; and
- Enhance informational exchanges with a refreshed Web site, access to references, and new materials (brochure, PowerPoint presentation, etc.).

IHS Area
DEHS Program Directory

Aberdeen Area/DEHS
115 4th Avenue S.E.
Aberdeen, SD 57401
Ph. (605) 226-7597

Alaska Area/OEHE
4141 Ambassador Drive, Suite 300
Anchorage, AK 99508-5928
Ph. (907) 729-3623

Albuquerque Area/DEHS
5300 Homestead Road, N.E.
Albuquerque, NM 87110
Ph. (505) 248-4947

Bemidji Area/EHSS
522 Minnesota Avenue N.W.
Bemidji, MN 56601
Ph. (218) 444-0503

Billings Area/OEHE
2900 4th Avenue North
Billings, MT 59101
Ph. (406) 247-7098

California Area/DEHS
650 Capitol Mall, Suite 7-100
Sacramento, CA 95814
Ph. (916) 930-3945, ext. 336

Nashville Area/DEHS
711 Stewarts Ferry Pike
Nashville, TN 37214-2634
Ph. (615) 467-1622

Navajo Area/DEHS
P.O. Box 9020
Window Rock, AZ 86515
Ph. (928) 871-5807

Oklahoma City Area/DEHS
701 Market Drive
Oklahoma City, OK 73114
Ph. (405) 951-3852

Phoenix Area/DEHS
40 North Central Avenue, Suite 720
Phoenix, AZ 85004
Ph. (602) 364-5078

Portland Area/DEHS
1414 NW Northrup Street, Suite 800
Portland, OR 97209
Ph. (503) 414-7774

Tucson Area/EHSB
7900 South J Stock Road
Tucson, AZ 85746-7012
Ph. (520) 295-5629

The Environmental Health Services Program

–of the–

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

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
INDIAN HEALTH SERVICE
Division of Environmental Health Services
801 Thompson Avenue, TMP 610
Rockville, MD 20852
Website: www.dehs.ihs.gov

Environmental Health Services

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