



THE IHS PRIMARY CARE PROVIDER

A journal for health professionals working with American Indians and Alaska Natives



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A Message from the Director of the Indian Health Service

To All *IHS Provider* Readers:

I would like to take this opportunity to recognize the importance of injury prevention and control in American Indian and Alaskan Native (AI/AN) communities. Unintentional injuries are the leading cause of death for AI/ANs ages 1 - 44 years, and Indians experience injuries at a rate 1.5 to 5 times greater than other Americans. Annually, injuries account for 41% of the years of productive life lost for AI/ANs.

Over the past decade, the Indian Health Service (IHS) Injury Prevention Program has contributed to overall decreases in injuries in AI/AN communities. Effective intervention strategies such as efforts to increase the use of safety belts, child safety seats, smoke alarms, and personal floatation devices have helped reduce the high rates of injuries in AI/AN communities. The IHS Injury Prevention Program also sponsors the Tribal Injury Prevention Cooperative Agreement Program, which funds 22 tribal Injury Prevention Coordinators and ten tribal injury prevention intervention projects in 30 different tribal communities across the country. In addition, the IHS Injury Prevention Program sponsors the Injury Prevention Practitioner Training and Injury Prevention Residency Fellowship programs, which have graduated more than 200 individuals since 1988. Many of these graduates have gone on to become some of our leading experts and dedicated proponents of injury prevention and control in AI/AN communities.

The history of the IHS Injury Prevention Program includes a shift in focus from an education-only strategy to the institutionalizing of proven public health practices. This special issue on injury prevention showcases the IHS and tribal

partnership efforts to combat the injury disparity rates in AI/AN communities. For more information about the IHS Injury Prevention Program, please visit <http://www.ihs.gov/MedicalPrograms/InjuryPrevention/index.cfm>.

I want to acknowledge the dedication of all those who have made outstanding contributions in injury prevention and control. This is a lifetime initiative to keep ourselves, our families, our communities, and our nation safe.

Charles W. Grim, DDS, MHSA
Director, Indian Health Service
Assistant Surgeon General

Injury Prevention in Indian Country

Lawrence Berger, MD, MPH, Clinical Assistant Professor of Pediatrics at the University of New Mexico School of Medicine, volunteered to coordinate two special issues of *The IHS Provider* dedicated to Injury Prevention in Indian Country. This is the first; the second will be published later this fall. We wish to recognize Dr. Berger's initiative and hard work that made this project possible.

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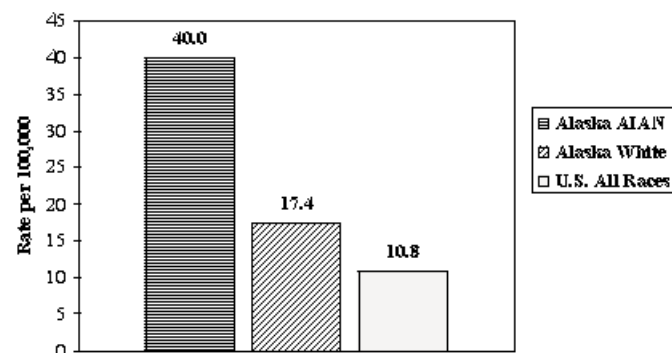
The Prevention of Suicide in Alaska's Tribal Health Care Setting

Kyla Hagan, MPH, Epidemiologist, Alaska Native Tribal Health Consortium, Alaska Native Epidemiology Center, Anchorage, Alaska; Ryan Hill, MPH, Epidemiologist, Alaska Field Station, CDC/National Institute for Occupational Safety and Health, Anchorage, Alaska; and Lisa Wexler, PhD, MSW, Assistant Professor, Community Health Education, Department of Public Health, School of Public Health and Health Sciences University of Massachusetts, Amherst, Massachusetts

Epidemiology of Suicide in Alaska

The Alaska Area has the highest suicide rate of all twelve IHS service Areas.¹ During the period 2000 to 2004, the age-adjusted suicide rate for American Indians and Alaska Natives (AI/ANs) in Alaska was 40.0 per 100,000. This rate is 2.3 times greater than the rate for White Alaskans (17.4 per 100,000) and 3.7 times greater than the US All Races population (10.8 per 100,000) (see Figure 1).²

Figure 1: Suicide rates, 2000-2004, age-adjusted



Suicide is the fourth leading cause of death among Alaska Native people, resulting in 229 deaths from 2000 to 2004 (see Table 1).² If the suicide rate among Alaska Natives (40.0 per 100,000) had been the same as the US All Races suicide rate (10.8 per 100,000), 167 fewer Alaska Native people would have died from suicide during this 5-year time period. Although the US White suicide rate decreased by 12% during 1979 to 2003, there was no significant change in the suicide rate among Alaska Native people during these years.³

While suicide rates in non-Native populations nationwide tend to be higher in older people, the opposite is true among Alaska Native people. Alaska Native people over the age of 55 are 57% less likely to commit suicide than the US White

Table 1. Alaska Suicide Mortality Rates, 2000-2004, WISQARS

Race	Both Sexes		Males		Females	
	Deaths	Age-Adjusted Rate	Deaths	Age-Adjusted Rate	Deaths	Age-Adjusted Rate
Am Indian/AK Native	229	40.0	171	59.9	58	19.8
White	403	17.4	326	28.2	77	6.3
All Races	650	20.4	508	31.8	142	8.8

population 55 and older. Conversely, suicide is the leading cause of death for young Alaska Native people ages 15 - 24 and is the second leading cause of death for 25 to 44 year olds. Alaska Native males suffer a suicide rate three times that of Alaska Native females (Table 1). Alaska Native males ages 15 - 24 years suffer the greatest burden. They are almost nine times as likely to die of suicide than US White males in this age group (150.8 per 100,000 vs. 17.6 per 100,000 for 2000-2004).² Alaska Native youth have the highest suicide rate of any IHS Area.⁴

The major risk factors for suicide in the general US population include mental and addictive disorders (including alcohol); easy access to lethal means; a history of previous suicide attempts; a history of physical or sexual abuse; a family history of suicidality; and recent and severe stressful life events.⁵ Studies specific to AI/AN youth have found that previous suicide attempts, family disruption, loss of ethnic identity, and a lack of a religious or a spiritual connection put these youth at an even higher risk of suicide than youth in the general population.⁵ The results of a 3-year suicide 'follow back' study of Alaskan suicides showed that risk factors salient to medical personnel include a disability or illness, a family history of mental illness, previous suicide attempts, aggressive behaviors, and substance abuse.⁶ Access to firearms is also seen as a risk factor in a state where two-thirds of all suicide deaths involve firearms.⁷

A recent, systematic review of suicide prevention strategies found that two approaches were effective in preventing suicide: educating physicians on the recognition and treatment of depression; and restricting access to lethal

means. Other interventions, such as public awareness and education campaigns, screening programs to identify at-risk individuals, and media efforts (e.g., establishing media guidelines and educating journalists) “need more evidence of efficacy.”⁸

Contact with Alaska Health Care System before Suicide

The 3-year Alaska ‘follow back’ suicide study reviewed suicide decedents’ prior access to health care. It showed that 64% of all suicide decedents had seen a primary care physician within six months of their death.⁶ Another recent study of Alaska Native males who died from suicide in northern Alaska found that contact with a primary care provider during the year before their death was common in this population. The retrospective case-control study compared 30 suicide cases to 30 controls matched for race, age, gender, and community of residence. Nearly three-fourths of suicide cases received some type of care in the region’s medical facilities (regional hospital and village clinics) during the 12 months preceding their death. Compared to the control group, Alaska Native males who died from suicide were 2.8 times more likely to have been treated at the hospital, 3.3 times more likely to have received care for an injury, and 22.2 times more likely to have been treated for an alcohol-related injury during the 12 months preceding their death.⁹ These studies suggest that there may be opportunities in the primary care setting to identify those most at risk of suicide and refer these patients to appropriate care before they choose to end their life.

Innovative strategies in Alaska

Within the Alaska Tribal Health System, tribally-operated health care organizations are working to reduce suicide in the health care setting in innovative ways. In addition to traditional pharmacotherapy, outpatient and inpatient behavioral health services and referrals to substance abuse treatment programs, several new programs are being implemented to reduce suicide rates. Initiatives include depression screening; safe firearm storage programs; gatekeeper training for community health aides on the recognition of warning signs of suicide; and case management services for Alaska Native people at risk of self-harm. A few of these programs are highlighted below.

Depression Screening in a Primary Care Setting and Case Management Services. The Southcentral Foundation, a tribal health organization in Anchorage, Alaska, has implemented a depression screening and intervention program in a primary care setting at the Alaska Native Medical Center. The screening and treatment protocol is modeled after the Institute for Healthcare Improvement’s Breakthrough Series. The protocol consists of two main components: a patient questionnaire and a provider interview, and was derived from the Primary Care Evaluation of Mental Disorders (PRIME-MD). PRIME-MD is a screening tool designed to assist general practitioners in the diagnosis of minor psychiatric disorders.

Screening for depression begins during intake with the Certified Medical Assistant or Licensed Practical Nurse. Based on responses to an initial set of questions, a second set of questions may be asked to gain more information regarding the severity of depression. After this initial screening and an interview with the provider, a determination is made if antidepressants and/or a referral to behavioral health services are needed. Education about self-care for depression is provided. Follow-up phone contact and in-person visits are made if anti-depressants are prescribed. Between 2001 and 2005, 58% of the patients screened positive for depression had not had a behavioral health visit or been diagnosed with a mood disorder within one year prior to screening.¹⁰ Thus, prior to the implementation of the screening program, these patients may not have been identified as depressed. This suggests that more patients in need of mental health and other services are being recognized and helped.

In May 2006, the Southcentral Foundation launched the Dena’a Yeets’ (Athabascan for “Our Breath of Life”) Program, which provides support and case management services to adult Alaska Native men and women who are at risk of self-harm. Participants can self-refer or be referred to the program by a health care provider. Participants complete a self-harm survey that is used by program staff to develop a care plan. The care plan includes but is not limited to referrals to substance abuse treatment programs, housing services, food assistance programs, and counseling services. The program is designed to facilitate a sense of individual self-worth, cultural identity, and a desire for life by engaging clients and their children in cultural activities including talking circles, drum-making, fishing, and potlucks (Bergeron D. Personal communication, March 28, 2007).

Referral to Gun Locker and Locking Medicine Cabinets for At Risk Youth. A fellow of the Indian Health Service’s Injury Prevention Program Development Fellowship implemented an intervention in a village in southwest Alaska for parents or guardians of youth who have suicide risk factors. The program offered parents locking medicine or gun cabinets to store lethal means. Suicidal risk factors considered were trouble with the law; history of suicide attempts; diagnosed mood disorder/behavioral health involvement; recent traumatic event; and alcohol/drug abuse. Local EMS volunteers installed medicine and gun cabinets in the homes of participants. Twenty-four referrals for medicine cabinets were made by local village health aides and 19 medicine cabinets were successfully installed in homes. Seven program participants were referred to the program because of the potentially lethal effects of an overdose of a medication that was prescribed to a member in the home even though none of the youth had risk factors for suicide. Five referrals were not home during the installation phase of the medicine cabinets. Only two referrals were made for gun lockers, so recipients of gun lockers were drawn by lottery. Although installation of the medicine and gun cabinets was well received, no follow-up on the long term use of the

cabinets or the program's impact on suicide attempts was conducted (Hagan KD. Unpublished).

Hospital-based Interventions in Rural Alaska. The Maniilaq Association, a tribal health and social service organization in Northwest Alaska is in the process of implementing two hospital-based approaches to suicide prevention in collaboration with Project Life (a new program within Maniilaq Behavioral Health). The first is a long-term postal contact program modeled after a randomized controlled trial conducted by Motto and Bostrom.¹¹ This program will send letters to people who come into the ED for a suicide attempt. The letters are intended to provide unconditional support for people as well as decrease help-seeking barriers in times of crisis. The letters will be sent by Project Life staff on holidays, birthdays, anniversary dates, and periodically throughout a three-year period. Motto and Bostrom found that their program significantly reduced the suicide rate among clients receiving the letters and for years afterward.

The regional hospital, in collaboration with Project Life, is also implementing a suicide/depression screening process in the acute care and emergency department. In the pilot phase, acute care nurses will do the screening. The screening instrument consists of two primary questions, one focused on depressive symptoms and the other on behavioral risks associated with suicide in the region. If the patient answers "yes" to either question, the nurse will then ask seven additional questions which are focused on depression and suicide risk. If the patient responds affirmatively to any of these questions, they will be referred to Maniilaq Counseling Services. The procedures for doing screening and referral in a culturally appropriate way are currently in development.

In addition to supportive letters and acute care screenings done in the hospital and clinic, Project Life has a wide variety of activities including organizing digital storytelling projects focused on cultural and community strengths; raising suicide awareness and resilience skills in the classroom; promoting a media campaign focused on changing social acceptance of suicidal behavior; aiding institutions in the creation and implementation of suicide prevention protocols; and providing suicide awareness and intervention trainings for clergy, health aides, and other community gatekeepers. The project, which builds on findings from several community-based research projects,¹²⁻¹³ began in 2006 and is funded by the Substance Abuse and Mental Health Services Administration.

Conclusion

Suicide prevention initiatives, such as depression screening and education about restriction of lethal means, are becoming more common in the health care setting. Interventions developed within the general population should be thoroughly evaluated for cultural appropriateness, applicability, and effectiveness before implementation within a tribal health care setting. Tribal primary and acute care clinics show promise of being an effective place for identifying those

at-risk and providing education, referral, and support. Sustainability of such initiatives is one of the biggest challenges that tribal health care organizations will face, as most facilities struggle daily with limited financial resources. To ensure optimal allocation of limited resources, programs need to be evaluated using both primary outcomes (completed and attempted suicides, suicidal ideation) and intermediate impacts (such as help-seeking behavior, identification of at-risk individuals, entry into treatment, and antidepressant prescription rates).⁹ Finding effective mechanisms for identifying risk factors and intervening in a clinical setting are the primary tasks of tribal health care organizations as they develop suicide prevention initiatives for their primary care settings.

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Helpful Sites

Indian Health Service Community Suicide Prevention Website: http://www.ihs.gov/NonMedicalPrograms/nspn/index.cfm?page=NSPN_A39_S124.cfm

Suicide Prevention Resource Center: www.sprc.org

Denaa Yeets Program: <http://www.southcentralfoundation.com/denaa.cfm>

Alaska Statewide Suicide Prevention Council: <http://www.hss.state.ak.us/suicideprevention/>

Acknowledgements

We would like to thank the following people and organizations for their suicide prevention work and/or their contributions to this article: Ellen Provost, Ruth Etzel, Denise Dillard, Doris Bergeron, Larry Berger, the Maniilaq association, the Southcentral Foundation, and the Substance Abuse and Mental Health Services Administration.

Introduction to *The IHS Provider* Special Issues on Injury Prevention

Lawrence R. Berger, MD, MPH, Clinical Assistant Professor of Pediatrics, University of New Mexico School of Medicine, Albuquerque, New Mexico

There has been impressive progress toward reducing the burden of injuries among American Indians and Alaska Natives (AI/AN). Over a period of twenty years (1982 - 1984 vs. 2002 - 2004), the age-adjusted mortality rate for unintentional injuries fell 28%, compared to a 5% decline for the US as a whole.¹ Many challenges remain, however, in the realm of both unintentional injuries (e.g., motor vehicle crashes, falls, and poisonings) and intentional injuries (e.g., intimate partner violence, other assaults, and suicides). As noted in the following articles, for example, the suicide rate for AI/ANs in Alaska is almost four times greater than for the overall US population; the motor vehicle mortality rate for one American Indian community is nearly eight times the national average.

Our goal for these special issues of *The IHS Provider* is to raise the visibility of injuries as a leading cause of preventable

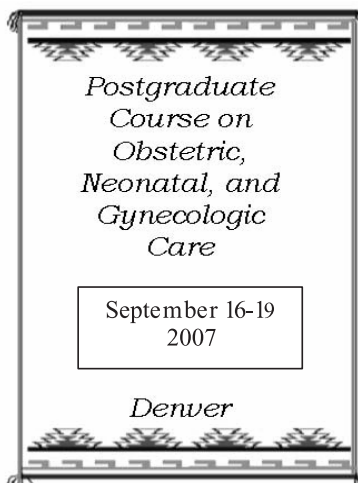
mortality and morbidity in American Indian and Alaska Native communities. In addition to sharing data for advocacy at the local and national levels, we highlight a number of successful interventions implemented by tribes, tribal organizations, and the IHS. An outstanding characteristic of these programs is that they employ strategies shown to be effective by rigorous evaluations. These are the public health equivalents of the “evidence-based” approaches recommended for clinical medicine.

Injuries can be devastating for individuals, families, and entire communities. We hope that these articles will stimulate new energy, and generate additional resources, for the prevention of both unintentional and intentional injuries.

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Postgraduate Course on Obstetric, Neonatal and Gynecologic Care



TARGET AUDIENCE

This course is directed to primary care providers, including physicians, clinical nurses, nurse practitioners, nurse midwives, and physician assistants caring for women and infants in Indian Health Service settings and tribally-operated health care facilities.

COURSE DESCRIPTION

The curriculum is designed to encourage a team approach to the care of women and their newborns, with a strong emphasis on the realities and limitations of care in the rural, isolated settings that are common to many Indian health facilities. The text gives a clinically-oriented approach to care in facilities where the nearest specialist may be 50 to 800 miles away. Like the course focus and text, the faculty for the course is experienced with care in the Indian health setting.

OPTIONAL NEONATAL RESUSCITATION PROGRAM (NRP) COURSE

The NRP provider course will be offered in conjunction with the regular course. This four and a half hour course will be held on Sunday morning September 16 from 8am to 12:30pm.

CONTINUING EDUCATION CREDIT

The American College of Obstetricians and Gynecologists (ACOG) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

This activity has been approved for AMA PRA Credit

The Indian Health Service Clinical Support Center (CSC) is accredited as a provider of continuing education for nurses by the American Nurses Credentialing Center (ANCC) Commission on Accreditation.

REGISTRATION

Registration will be on a first come first served basis. Tuition, travel, and per diem expenses are the responsibility of the attendee or the sponsoring Indian health program. Scholarships covering tuition and lodging are available. **Register now for the best scholarship opportunity!** Send your completed registration form to Yvonne Malloy, ACOG, 409 12th Street SW Washington, DC 20024 (phone: 202-863-2580; fax: 202-484-3917).

POSTGRADUATE COURSE ON OBSTETRIC, NEONATAL, AND GYNECOLOGIC CARE

(Please type or print)

Name _____
Last
First

PA CNM
 MD/DO RN
 NP Other _____

Work Address _____

Home Address _____

Telephone (Work) _____ (Home) _____ (Fax) _____

Service unit/health facility name _____

Email Address: _____

Please register me for the postgraduate course to be held September 16-19, 2007. I have checked the appropriate registration boxes below:

- IHS employee:**
 - Physician \$300
 - Other health professional \$200
- Non-IHS employee:***
 - Physician \$450
 - Other health professional \$350
- Please enroll me in the NRP course for an additional early registration fee of \$75.

* Employees of tribes that have not withdrawn their tribal shares should use the IHS scale. If you are uncertain of share status, verify with Carolyn Aoyama at (301) 443-1840. Applications received after session is filled will be placed on alternate list.

Reduce Injuries: Eliminate Disparities in Child Mortality Rates among American Indian and Alaska Native Children and Youth

Lawrence R. Berger, MD, MPH, Clinical Assistance Professor, University of New Mexico Department of Pediatrics, Albuquerque, New Mexico; L.J. David Wallace, MSEH, Injury Prevention Specialist, Motor Vehicle Injury Prevention Team, Division of Unintentional Injury Prevention, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, Atlanta, Georgia; and Nancy M. Bill, MPH, CDR USPHS, Injury Prevention Manager, Indian Health Service, Rockville, Maryland

Introduction

Disparities in health outcomes among populations have many possible causes. They include socio-economic factors, differences in the availability and accessibility of medical services, variations in the quality of medical care, lifestyle differences, and even genetic influences.¹⁻⁵ One example of a major health disparity is the difference in child mortality rates among American Indian/Alaska Native (AI/AN) children and White children.⁶ The overall child mortality rate for AI/AN children, ages 1 through 19 years, is 44.28 per 100,000 for the years 2000 - 2002. This rate is nearly 40% higher than that of White children in the US (31.94 per 100,000).⁷ Because injuries are the leading cause of death for US children ages 1 - 19, and account for 75% of all deaths among AI/AN children in that age group,⁸ we investigated the impact of mortality from injuries on the overall child mortality rate in these two populations.

Methods

We determined cause of injury, and calculated all-cause mortality and age-specific mortality rates, for all AI/AN and White children and youth 0 - 19 years of age in the US using CDC's Web-Based Injury Statistics Query and Reporting System (WISQARS).⁷ WISQARS contains mortality data compiled by the National Center for Health Statistics (NCHS). For the years 2000 - 2002, WISQARS categorizes external cause of injury death, and all-cause mortality, from the International Classification of Diseases, 10th Revision.⁹ Mortality rates per 100,000 population by race, age, and cause are automatically calculated in WISQARS using population statistics from the US Census Bureau.⁷ Injury causes described here are grouped into several categories including all injuries, all unintentional causes, unintentional motor vehicle traffic crashes, unintentional pedestrian events, unintentional drowning, unintentional fire/burn, unintentional suffocation, unintentional poisoning, unintentional falls, homicide, and suicide. Because the vast majority of infants die from non-injury causes, we analyze infants separately in Tables 1, 3, and 4.

To determine the contribution of injuries to all-cause mortality, we calculated an "adjusted" all-cause mortality rate for AI/AN. The adjusted rate assumes that the AI/AN injury mortality rate is equal to the White injury mortality rate. The adjusted rate was obtained by 1) calculating the number of excess AI/AN injury deaths by subtracting the White all-injury mortality rate from the AI/AN all-injury mortality rate and then

Table 1. 10 Leading causes of death, American Indians/Alaska Natives and Whites Ages 0-19 years, both sexes, 2000-2002, United States

Rank	AI/AN*	White*	AI/AN*	White*
	Infants	Infants	Ages 1-18	Ages 1-18
	Number (rate)	Number (rate)	Number (rate)	Number (rate)
1	Congenital Anomalies 169 (137.1)	Congenital Anomalies 12,943 (140.4)	Unintentional Injury 745 (22.9)	Unintentional Injury 27,453 (15.3)
2	SIDS 152 (110.2)	Short Gestation 7,404 (80.3)	Suicide 163 (5.0)	Malignant Neoplasms 5,170 (2.9)
3	Short Gestation 113 (82.0)	SIDS 4,508 (48.9)	Homicide 132 (4.0)	Suicide 4,727 (2.6)

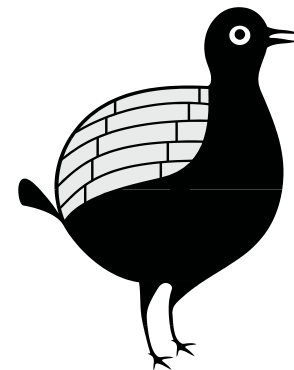
Table 1. (continued)

4	Unintentional Injury 67 (48.6)	Maternal Complications 2,809 (30.6)	Malignant Neoplasms 60 (1.8)	Homicide 3,781 (2.1)
6	Maternal Complications 50 (36.3)	Placenta, Cord 2,085 (22.6)	Congenital anomalies 38 (1.2)	Congenital anomalies 2,581 (1.4)
8	Placenta, Cord 33 (23.9)	Respiratory Distress 1,839 (19.9)	Heart Disease 35 (1.1)	Heart Disease 1,892 (0.94)
7	Influenza and pneumonia 29 (21.0)	Unintentional Injury 1,799 (19.6)	Influenza and pneumonia 15	Influenza and pneumonia 562 (0.31)
8	Circulatory System 24 (17.4)	Bacterial Sepsis 1,408 (15.2)	Septicemia 15	Septicemia 475 (0.26)
9	Homicide 21 (15.2)	Circulatory System 1,295 (14.0)	Benign Neoplasms 9	Benign Neoplasms 451 (0.25)
10	Bacterial Sepsis 20 (14.5)	Intrauterine Hypoxia 1,233 (13.4)	Chronic lower respiratory disease 9	Cerebrovascular 428 (0.24)

- * Number of deaths (rate per 100,000). Rates are not calculated for those causes with fewer than 20 deaths because of potential instability.
- ** Injury-related causes are represented in bold.

Table 2. Leading causes of injury death, American Indians/Alaska Natives, and Whites, Ages 0-19, 2000-2002, United States

Cause of Death	AI/AN		White	AI/AN:White
	Number	Rate*	Rate*	Rate Ratio
Motor Vehicle Traffic	517	15.2	9.8	1.5
 Pedestrian**	68	1.9	1.1	1.7
Suicide	163	4.8	2.5	1.9
Homicide	163	4.5	2.3	1.9
Drowning	74	2.2	1.4	1.6
Unintentional Suffocation	48	1.4	1.0	1.4
Fire/Burn	38	1.1	0.6	1.8
Unintentional Poisoning	31	0.9	0.7	1.3
Falls	9		0.3	



- * Rate per 100,000 population. Rates are not calculated for those causes with fewer than 20 deaths because of potential instability.
- ** Pedestrian deaths are included in the motor vehicle traffic category.

multiplying the excess death rate by the AI/AN population; 2) subtracting the AI/AN excess injury deaths from the total number of AI/AN deaths from all causes; and 3) re-calculating the AI/AN all-cause mortality rate using the adjusted numerator. Using data from Tables 3 and 4, the calculation for adjusted AI/AN all-cause mortality rate, age 0 - 19 years would be:

$$1. \text{ Excess Deaths} = 33.9/100,000 - 20.6/100,000 \times 3,396,861 = 452$$

$$2. \text{ Adjusted Deaths} = 2,482 - 452 = 2,030$$

$$3. \text{ Adjusted AI/AN all-cause mortality rate} = 2,030 \times 100,000 \div 3,396,861 = 59.8 \text{ per } 100,000.$$

Results

In the 1 - 19 year age group, the number of *injury deaths* (unintentional injury, homicide, and suicide) is far greater than the number of deaths from the next *seven* leading causes combined: for AI/AN children, 1,040 injury deaths vs. 182

Table 3. Child mortality by age group and leading cause American Indians/Alaska Natives and Whites, 2000-2002, United States

Age	<1	1-4	5-9	10-14	15-19	0-19 total
	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)
AI/AN:						
All deaths, all causes	1,039 (100)	284 (100)	142 (100)	226 (100)	791(100)	2,482 (100)
All injury deaths*	96 (9.2)	137 (48.2)	91(64.1)	156 (69.0)	672 (85.0)	1,152 (46.4)
Unintentional injury	67 (6.4)	102 (35.9)	83 (58.5)	120 (53.1)	440 (55.6)	812 (32.7)
Homicide	21 (2.0)	32 (11.3)	6 (4.2)	10 (4.4)	84 (10.6)	153 (6.2)
Suicide			1 (0.7)	24 (10.6)	138 (17.4)	163 (6.6)
White:						
All deaths, all causes	54468 (100)	10,570 (100)	6 ,777 (100)	8,981 (100)	31,121 (100)	111917 (100)
All injury deaths*	2,504 (4.6)	4,612 (43.6)	3,043 (44.9)	4,668 (52.0)	24,248 (77.9)	39,075 (34.9)
Unintentional injury	1,799 (3.3)	3,843 (36.4)	2,712 (40.0)	3,532 (39.3)	17,366 (55.8)	27,453 (24.5)
Homicide	563 (1.0)	666 (6.3)	283 (4.2)	370 (4.1)	2,462 (7.9)	3,781 (3.4)
Suicide			14 (0.2)	672 (7.5)	4,041 (13.0)	4,727 (4.2)

* Includes "intent unknown"

deaths from the next seven other causes (ratio of 5.7:1); for White children, 35,961 injury deaths vs. 11,339 deaths from the next seven other causes (ratio of 3.2:1) (Table 1). Among AI/AN ages 1 - 19 years, the four leading causes of death in rank order are unintentional injuries, suicide, homicide, and cancer. Among Whites ages 1 - 19, the four leading causes are (in order) unintentional injuries, cancer, suicide, and homicide.

The situation is different for infants under one year of age, where congenital anomalies, SIDS, and the consequences of short gestation are the leading causes of death in both populations. Among AI/AN infants, unintentional injury ranks fourth as a leading cause of death, and homicide ninth. Among White infants, unintentional injury ranks seventh as a leading cause of death (Table 1) while homicide ranks fourteenth.

Mortality Rates by Cause and Age Group

Motor vehicle traffic crashes were the leading cause of injury death among AI/AN and White children and youth ages 0 - 19 years, with the AI/AN rate 1.5 times greater than the White rate (Table 2). Suicide and homicide were the second and third leading causes of injury death among AI/AN children

and youth, with rates 1.9 times greater than rates for White children and youth. The causes of injury with the least disparity for AI/AN children and youth were unintentional poisoning and unintentional falls. Injury death rates from these causes for AI/AN children and youth were only slightly higher or the same as rates for Whites (rate ratio of 1.3 and 1.0, respectively) (Table 2).

As a percentage of all AI/AN deaths to children and youth, injuries ranged from 9% of deaths among infants to 85% of the deaths to teens aged 15 - 19 years (Table 3). The importance of injuries as a leading cause of death among AI/AN children and youth increases dramatically after infancy, and goes up with each age group. For ages 0 - 19 years combined, almost half of all AI/AN deaths were due to injuries, compared to just over a third of the deaths among Whites (Table 3). For the age groups 1 - 4 and 15 - 19 years, the percentage of deaths due to unintentional injuries was similar for both AI/AN and Whites (36% and 56% respectively). Homicide was responsible for a relatively large proportion of the deaths to young AI/AN children (2% of infants, 11.3% of ages 1 - 4) and older teens (10.6% of ages 15 - 19).

Table 4. Child Mortality Rates* by Age Group American Indians/Alaska Natives and Whites 2000-2002, United States

Age	≤1	1-4	5-9	10-14	15-19	0-19 total
Injury mortality rates						
AI/AN unadjusted	69.6	21.4	10.4	16.9	76.5	33.9
AI/AN adjusted	27.1	12.5	6.4	9.4	49.8	20.6
White	27.1	12.5	6.4	9.4	49.8	20.6
All-cause mortality rate						
AI/AN unadjusted	753.6	45.3	16.6	24.8	91.4	73.1
AI/AN adjusted	710.8	36.4	12.5	17.3	64.7	59.8
White	590.6	29.3	14.4	18.4	65.0	59.2
3-year population						
AI/AN	137,878	626,519	857,174	909,675	865,615	3,396,861
White	9,221,896	36,091,523	47,155,295	48,734,576	47,893,599	189,096,889

* Per 100,000 population.

† All-cause mortality rates have been re-calculated based on injury mortality rates equal to US White rates. AI/AN adjusted all-cause mortality rate = (total deaths – excess injury deaths) X 100,000 ÷ AI/AN 3-year population

Injury mortality rates were highest among AI/AN infants (69.6 per 100,000) and older teens 15 - 19 years (76.5 per 100,000) (Table 4). When the AI/AN all-cause mortality rate was adjusted for the excess injury rate, the new adjusted all-cause mortality rate for AI/AN ages 0 - 19 years was essentially the same as the White rate (59.8 per 100,000 vs. 59.2 per 100,000) (Table 4 and Figure 1). Adjusted all-cause mortality rates for AI/AN were *lower* than for White rates in age groups 5 - 9, 10 - 14, and 15 - 19 years, but AI/AN adjusted rates remained higher among infants and 1 - 4 year olds (Table 4).

Discussion

A striking finding is that *the overall child mortality rates for AI/AN and US White populations, ages 0 - 19 years would be essentially equal (59.8 vs. 59.2 per 100,000, respectively) if AI/AN child injury rates were reduced to those of the US White population.* In some age groups (5 - 9, 10 - 14, and 15 - 19 years) the overall child mortality rates would be *lower* among AI/AN children. Only among infants and 1 - 4 year olds would the overall child mortality rate remain higher among AI/AN children (Table 4 and Figure 1).

Targeting injury prevention to AI/AN children and youth is especially warranted in light of the age distribution of the AI/AN population. According to the 2000 Census, 33.3% of individuals who are American Indians or Alaska Natives are under the age of 18. Almost 40% of persons who are Navajo, Sioux, or Alaska Natives are under 18 years of age. This compares to 25.6% of the total US population.¹⁰

If the injury death rate among AI/AN children and youth (birth to 19 years) had been reduced to the rate of White children and youth the same age, an estimated 452 AI/AN injury-related deaths from 2000 - 2002 would have been

prevented. Reducing child injury rates among AI/AN children and youth (birth to 19 years) from 34 to 21 per 100,000 (the current rate for Whites and a 38% reduction) is an ambitious goal, but feasible. From 1982 to 2002, unintentional injury mortality rates among AI/AN children aged 0 - 9 years decreased 39%. During this same time period, rates for White children decreased 51%. Among AI/AN youth aged 10 - 19 years, unintentional injury death rates decreased 28%; the decrease among White youth was 30% (CDC, NCIPC, unpublished study). Although AI/AN unintentional injury death rates have decreased over time, the overall injury disparity compared with rates for Whites persists.⁶

Our findings are subject to at least two limitations. First, AI/AN mortality rates probably underestimate the true rates because of misclassification of race on state death certificates. The extent of racial miscoding in AI/AN children and youth is not well-defined, but our reported AI/AN mortality rates should be considered conservative (under-estimates, rather than over-estimates).^{11,12} Second, cause-specific rates of infant deaths are complicated by diagnostic ambiguities.¹³ Differentiating among unintentional suffocation, SIDS, and child abuse, for example, often requires a postmortem examination, death scene investigation, and detailed review of case records.¹⁴ Particularly in AI/AN communities, geographic isolation, lack of resources, an absence of tribe-specific child mortality review teams, and cultural practices can be barriers to fulfilling these requirements.

Conclusion

Few health disparities have such potential for elimination as the discrepancy in child mortality rates among American Indian and Alaska Native children. In 2000, The IHS Injury

Prevention Program and the American Academy of Pediatrics hosted a Senate briefing in Washington, DC, including the testimony of AI/AN people about the burden of childhood injuries and the need for additional resources. More recently, the national Tribal Injury Prevention Steering Committee (TSC) has requested of Congress \$10 million over five years to expand the capacity-building injury prevention program for tribes. While great strides have been made in establishing child passenger safety programs in AI/AN communities, injury prevention programs that target adolescents,^{15,16} and interventions to prevent all forms of child maltreatment,¹⁷⁻²¹ deserve more emphasis among native populations. Many injury prevention strategies are effective,²²⁻³⁴ but too few are fully implemented in AI/AN communities.³⁵⁻³⁷

Reducing childhood injuries requires on-going efforts. For example, every newborn requires a car safety seat before leaving the hospital, and programs to enforce traffic safety laws must be repeated often or they lose their effectiveness. There is a need for expanded collaborations among tribal nations, the IHS, and other national agencies and organizations, such as the Bureau of Indian Affairs Highway Safety Program, Department of Justice, and law enforcement groups.

The Committee on Native American Child Health and the Committee on Injury and Poison Prevention of The American Academy of Pediatrics published a joint statement noting that “strong advocacy is needed to promote childhood injury prevention as an important priority for federal agencies and tribes.”³⁷ By highlighting the dramatic impact of child injury rates on overall child mortality, we hope injury prevention programs will be continued and expanded at the local, state, and national levels.

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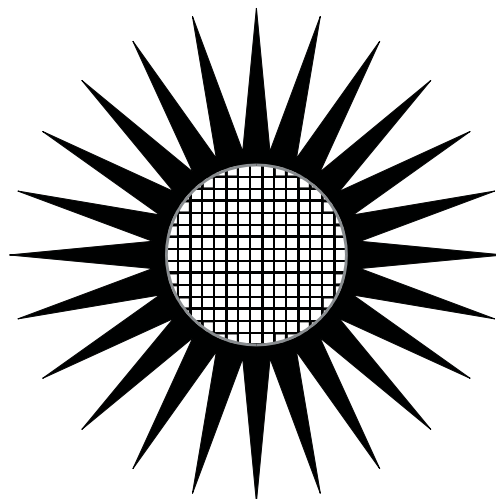
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Disclaimer

The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention or the Indian Health Service.



Using Evidence-Based Strategies to Reduce Motor Vehicle Injuries on the San Carlos Apache Reservation

Christine Reede, Coordinator, Motor Vehicle Injury Prevention Program, San Carlos Police Department, San Carlos Apache Tribe, San Carlos, Arizona; Stephen R. Piontkowski, MSEH, Service Unit Environmental Health Officer, Office of Environmental Health and Engineering, San Carlos, Arizona; and Gordon Tsatoke, BS, District Injury Prevention Coordinator, Eastern Arizona District Office, Lakeside, Arizona

Introduction and Background

Motor vehicle injuries are a large public health burden for Americans Indians and Alaska Natives (AI/AN). In 2000, the overall motor vehicle injury death rate (age-adjusted) was 27.5 per 100,000 for American Indians/Alaska Natives versus 15.5 for US All Races. In Arizona, the rate was 76.8 for American Indians and 19.9 for All Races.¹ Motor vehicle injuries are an even more severe problem among members of the San Carlos Apache Tribe in eastern Arizona. In 2000, the motor vehicle injury death rate was 117 per 100,000 for American Indians who resided on the San Carlos Apache Reservation.²

The San Carlos (SC) Apache Indian Reservation is located in east central Arizona, 110 miles east of Phoenix. There are 10-12,000 tribal members residing on the reservation's 2,812 square miles. Tribal enterprises include a hotel and casino resort, convenience stores and gas stations, a telecommunications company, a construction aggregate supply company, and a saw mill. The unemployment rate in 2003 was 24.8%. There is an IHS hospital at San Carlos which serves primarily as an out-patient facility, and a satellite clinic about 30 miles east in Bylas, where there is also a police department sub-station. The SC tribal police department has 23 full-time officers. There are three full-time tribal judges.

The motor vehicle injury problem on the reservation is exacerbated by two factors: minimal occupant restraint use and alcohol consumption by drivers. In 2002, occupant restraint use on the reservation was 21% for drivers, 10% for adult passengers, and 0% for child car seats.³ In comparison, the overall safety belt use rate for Indian country (excluding Navajo), was 55% and 81% for the United States overall.^{4,5} A 1999 study of motor vehicle crashes (MVCs) on the reservation's four major roadways found that 24% of all crashes involved alcohol. Alcohol was involved in 50% of crashes with a fatality and 38% of all injury crashes.⁷

Evidence-based strategies refer to injury prevention interventions that research has proven to reduce injuries.⁸⁻¹¹ Table 1 summarizes the population-based interventions to

Table 1. Population-based interventions to reduce motor vehicle occupant injuries: Recommendations of the Task Force on Community Preventive Services⁸

Use of Child Safety Seats
Child safety seat laws
Community-wide information and enhanced enforcement
Distribution and education campaigns
Incentive and education Programs
Use of Safety Belts
Safety belt laws
Primary enforcement laws
Enhanced enforcement
Reducing Alcohol- Impaired Driving
.08 blood alcohol concentration (BAC) laws
Lower BAC laws for young or inexperienced drivers
Minimum legal drinking age laws
Sobriety checkpoints
Intervention training programs for servers of alcoholic beverages
Mass media campaigns
School-based instructional programs

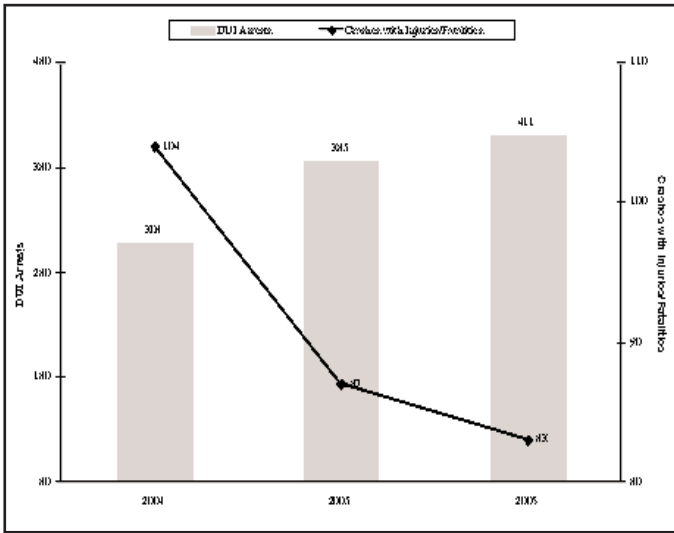
reduce motor vehicle occupant injuries recommended by the US Task Force on Community Preventive Services.¹²

Methods

In December 2004, the San Carlos Police Department established a motor vehicle injury prevention program with funds from the Centers for Disease Control and Prevention (CDC). The Motor Vehicle Injury Prevention (MVIP) Program was funded for four years to implement evidence-based strategies to reduce motor vehicle-related injuries and deaths. It currently employs one full-time coordinator. The MVIP Program's interventions and programs were selected from *The Guide to Community Preventive Services*, a systematic review of community-based interventions.¹² Planned program activities included increased sobriety checkpoints, efforts to lower the legal limit to 0.08% blood alcohol concentration (BAC) for drivers on the reservation, and a public information media campaign.

In its first years of operation, the SC MVIP Program

Figure 1. Driving Under the Influence (DUI) arrests and crashes with injuries and/or fatalities on the San Carlos Apache Reservation, 2004-2006



focused on reducing alcohol-associated crashes. The program conducted sobriety checkpoints and implemented a comprehensive media campaign from 2005 through 2006. At a sobriety checkpoint, law enforcement officers systematically stop vehicles to assess drivers' level of alcohol or other drug impairment. Field sobriety and breathalyzer tests were utilized to assess alcohol impairment. The program reviewed sobriety checkpoint resources (manuals, policies, procedures, educational materials, media resources) from the Bureau of Indian Affairs Indian Highway Safety Program; Internet sites (e.g., the National Highway Traffic Administration website, www.nhtsa.gov); and by personal visits to other tribal and non-tribal police departments. Standard operating procedures were developed and approved for use by the SC Tribal Law and Order Committee. The locations, times of day, and days of the week for checkpoints were determined with anecdotal evidence and police crash reports. Sobriety checkpoints were conducted by the Police Department's DUI Task Force, which was instituted by the MVIP Program.

The comprehensive media campaign used both fee and non-fee based media. The media included the tribal newspaper and radio station, the local casino marquee, and public bulletin boards. Focus groups were held to develop specific and culturally appropriate messages. Messages were advertised more frequently during tribal and national holidays.

Approval for publication of this report was obtained from the San Carlos Apache Police Department.

Results

Between 2004 through 2006, there were 1,104 DUI arrests and 21 sobriety checkpoints involving 7,536 vehicles. An aggressive education and marketing campaign included 38 public service announcements and 21 community media events. These efforts were associated with a 33% increase in Driving Under the Influence (DUI) arrests, a 20% reduction in crashes involving injuries and/or fatalities (Figure 1), a 33%

reduction in nighttime crashes, and 27% reduction in overall police-reported crashes. By contrast, driver, adult passenger, and child restraints – which were not specifically targeted for intervention in 2004 through 2006 — increased a very modest 8%, 6%, and 5%, respectively (Table 2).

Discussion/Conclusions

Sobriety checkpoints and a comprehensive anti-DUI media campaign are effective tools for use in American Indian communities. That the largest (33%) decline in motor-vehicle crashes occurred during night-time hours supports the conclusion that the DUI campaign contributed to decreased drinking and driving.

Our results are consistent with *The Guide to Community Preventive Services* findings that sobriety checkpoints can reduce injuries, deaths, and overall crashes. Several factors contributed to our program's success:

- Basing the MVIP Program in the Tribal Police Department
- Forming extensive partnerships
- Establishing a DUI Task Force
- Hiring a uniquely-qualified program coordinator
- Obtaining consistent funding
- Demonstrating community support
- Providing incentives to participating police officers

The establishment of the MVIP Program was a direct result of the foresight and commitment of the Tribal Police Department. The department's leaders recognized the need for a comprehensive prevention effort; the importance of reliable data collection for planning and evaluation; and the value of extensive partnerships. Having the MVIP Program housed in, and managed by, the police department led to tribal ownership of the program from its very inception.

Program partners included federal agencies (e.g., Indian Health Service, Centers for Disease Control and Prevention, Bureau of Indian Affairs), multiple law enforcement agencies (tribal, state, county, and city municipalities), a private-sector marketing firm, the non-profit Intertribal Council of Arizona (ITCA), and several tribal programs.

The DUI Task Force consisted of police officers, police department administrators (the chief of police and police captain), and the MVIP Program Coordinator. Having a designated Task Force allowed the department to focus enforcement resources on drinking and driving, improve communication with other police jurisdictions, create a strategic plan, and sustain the initiative over time. Long-term (four-years) financial support has enabled the program to carefully plan, implement, and evaluate the interventions. Major expenses included police officer overtime pay and equipment for the sobriety checkpoints.

The Program Coordinator is a San Carlos Apache tribal member with training in injury prevention and accounting, skill in using computers for desktop publishing and database searches, and experience as a tribal employee with SC law

Table 2. Summary of data related to the San Carlos Motor Vehicle Injury Prevention Program, 2004-2006.

Item	2004	2005	2006	Change from 2004-2006
Driving Under the Influence				
# of DUI* arrests	308	385	411	33.4 %
# of sobriety checkpoints	0	9	12	12
# vehicles stopped at DUI checkpoints	0	3,644	3,892	3,892
Media				
# of unpaid PSAs**, newspaper articles, local access channel	0	3	4	4
# of paid PSAs, newspaper articles, local access channel	0	11	20	20
# of community media events	0	9	12	12
Total crashes				
# of police-reported crashes	338	276	247	- 26.9%
# of crashes occurring in “daytime” (6 AM – 5:59 PM)	191	159	142	- 25.7 %
# of crashes occurring at “nighttime” (6 PM – 5:59 AM)	146	102	98	- 32.9 %
Crashes with injuries and/or fatalities				
# of crashes with injuries and/or fatalities	104	87	83	-20.2 %
# of fatal crashes	6	6	5	-16.6 %
Observed occupant restraint use (%)				
Drivers	13.2	20.9	20.8	7.6 %
Adult passengers	4.7	15.7	10.3	5.6 %
Children under 9 years	0	8.5	5.1	5.1 %

*Driving Under the Influence

**Public service announcements

enforcement and the Tribal Housing Authority. She has been able to bridge the disciplines of public health and law enforcement, and to work closely with community members, tribal agencies, and policy makers.

A survey in 2005 revealed extensive community support. Ninety-four percent of the respondents indicated it was “very important” to do something to reduce drinking and driving on the SC Apache Reservation, and 81% favored conducting sobriety checkpoints.

Our experience is consistent with factors associated with successful sobriety checkpoint programs nationally: an active local task force to manage checkpoints, available financial and human resources, an effective communication strategy, and support from the general public and officials to deter alcohol impaired driving.¹³⁻¹⁶ Also of great value was the use of incentives to encourage participation by police officers in the DUI effort. Incentives included “home-cooked” meals before the checkpoints; awards (food, windbreakers, jackets) for exceptional performance; and an expense-paid trip to a national traffic safety conference for the officer with the most DUI arrests in a calendar year. The incentives were especially important in the face of a chronic shortage of police officers.

Conclusion

In May, 2007, the San Carlos Apache Tribal Council passed two important motor vehicle-related resolutions. The first lowers the presumption of alcohol impairment from a BAC of 0.10% to 0.08%. The second establishes a primary occupant restraint law for the SC Apache Reservation. Both these resolutions are expressions of a commitment to save lives and reduce injuries. They are also an expression of tribal sovereignty, in that the SC code will be a primary law while Arizona’s adult occupant restraint law provides for only “secondary” enforcement (that is, seat belt citations can only be issued if a vehicle is stopped for some other violation).

The SC MVIP Program plans to increase its efforts to reduce alcohol-impaired driving by conducting sobriety checkpoints, increasing the frequency of BAC testing, and adopting uniform standards for coding on police reports. It will also seek to vigorously publicize and enforce the primary occupant restraint law.

The combination of police enforcement efforts, educating the public and stakeholders about the seriousness of motor vehicle crashes and methods of prevention, and advocating for needed policy change all greatly enhance the ability of tribe to

save lives and reduce suffering. We recommend these evidence-based strategies to other tribal communities seeking to reduce motor vehicle-related injuries and fatalities.

For further information about the San Carlos MVIP Program, please contact:

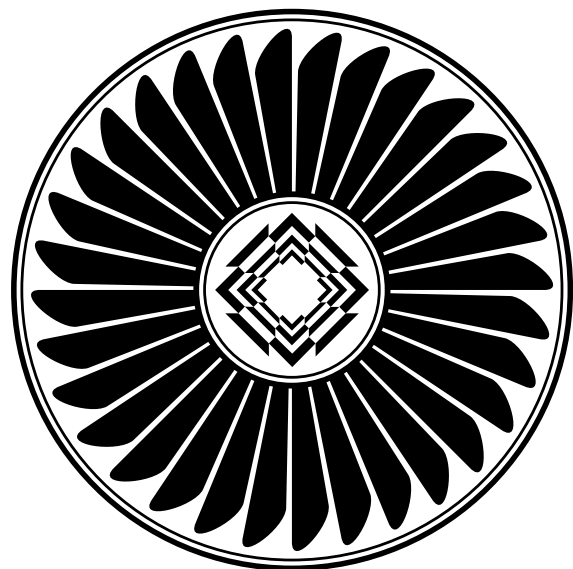
Christine Reede, San Carlos MVIP Program
Coordinator
Phone (928) 475-2338
Fax (928) 475-2805
E-mail creedescpd@yahoo.com

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The Bemidji Area IHS Sleep Safe Program: Increasing Smoke Alarm Usage in American Indian Head Start Homes

CAPT Diana M. Kuklinski, MS, RS, Director, Environmental Health Services Section, Bemidji Area Indian Health Service, Bemidji, Minnesota; and Harold Cully, BS, RS, Area Injury Prevention Specialist, Oklahoma Area Indian Health Service, Oklahoma City, Oklahoma

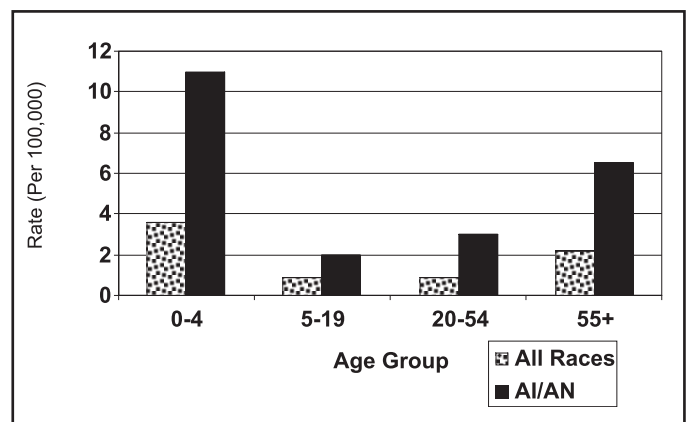
Introduction

The Bemidji Area Indian Health Service (BAIHS) Injury Prevention (IP) Program, part of the Environmental Health Service Section, provides services to 34 reservations in Minnesota, Wisconsin, and Michigan. Our program strives to reduce injury rates of American Indians (AI) by increasing tribal capacity in developing and implementing comprehensive local programs. This is achieved by IHS and tribal environmental health and injury prevention staff working in partnership with local communities in implementation of IP programs.

Although fire-related deaths and disparities have been declining gradually over the past two decades, the residential fire mortality rate for American Indians and Alaska Natives (AI/AN) is 1.5 times the national All Races rate.¹ In AI/AN populations, fire mortality rates vary geographically; they are highest in the north-central and middle western US and Alaska, where rates are 10 times the national All-Races rates.² The majority of fatal residential fires for all races combined occur in homes with absent or inoperable smoke alarm(s).³ Other major risk factors include smoking, alcohol impairment, and physical disability.

Young AI/AN children (preschoolers) and elders are at highest risk of residential fire-related mortality¹. The high rate of fire-related mortality in children has been attributed to their 1) limited ability to independently and/or quickly escape from a house fire; 2) lack of understanding of the need to escape from fire; and 3) difficulty in awakening from a deep sleep when a smoke alarm sounds.⁴ In the Bemidji Area, young AI children aged 0 - 4 years old are at the highest risk of fire-related death (10.9 per 100,000)(Figure 1).¹ This is over three times higher than the All-Races rate for this age group (3.6 per 100,000) in Bemidji Area. Thus, Bemidji Area IHS has prioritized implementing fire safety programs aimed at reducing the exceedingly high rate of fire injury in young AI children.

Figure 1. Age specific fire- and burn-related deaths per 100,000 population, American Indians vs. All Races, by selected age groups, Minnesota, Wisconsin, Michigan combined (Bemidji Area IHS States), 1989-1998*



*Data presented are for years prior to implementation of the Sleep Safe Program

Since the first residential smoke alarm was patented in 1969,⁵ they have proven to reduce residential fire-related death by 40 - 60 percent.⁶ Although over 90 percent of homes in the US are reported to have at least one smoke alarm,⁷ this is often not the case for AI/AN populations. In some AI/AN communities, fewer than half of the homes surveyed had even one operable smoke alarm, and smoke alarms were often disconnected due to frequent “nuisance” alarms from cooking or moisture from bathrooms.⁸⁻¹⁰ Factors contributing to nuisance alarms in AI/AN homes include small home size (<1,000 square feet), prevailing use of frying as a cooking method, and location and type of smoke alarm installed.^{8,9,11}

Many AI/AN children are enrolled in Head Start. Tribal Head Start grantees are funded through the Administration for Children and Families, Head Start Bureau, United States Department of Health and Human Services. The IHS Head Start Program, through an interagency agreement with the Head Start Bureau, provides preventive health support services for AI/AN grantees. Nationally, 197 tribal Head Start and Early Head Start programs provide comprehensive health, education, nutritional, and other developmental services to

25,911 AI/AN children ages 0 - 5 years in the US.¹² The local Head Start provides a central meeting place where children and parents congregate, classroom instruction and parent meetings, and education and interaction on a variety of topics, including health and safety. These messages are further reinforced by required home visits conducted by Head Start staff.

Several studies have shown that residential fire injury rates declined after targeting high-risk neighborhoods with smoke alarm installation combined with an education and media campaign.¹³ Further, one study showed that Head Start home visitors were successful in increasing education and usage of smoke alarms in homes of Head Start children.¹⁴ Consistent with these strategies, we created the Sleep Safe Program in 1998. The goal of this program is to reduce residential fire-related mortality in AI/AN children ages 0 - 5 years through provision of education and installation of smoke alarms. This program is a collaborative partnership between the IHS Division of Environmental Health Services, the US Fire Administration, and the IHS Head Start Program. It emphasizes community partnering via tribal Head Start programs, proper selection and location smoke alarms, education and reinforcement of fire safety educational messages, initial and follow-up home visits to assess smoke alarm operability, and proper installation of smoke alarms.

Methods: Sleep Safe Program Development

Indian Health Service Environmental Health Program staff coordinate the Sleep Safe Program's activities, with the lead Coordinator from the Oklahoma Area IHS and two co-coordinators from Bemidji Area IHS. The initial planning for this program involved a meeting in 1998 between IHS Environmental Health and IHS Head Start representatives to develop an outline for the curriculum.¹⁵ The curriculum was intended to be flexible, based on the recognition that each community has a different set of needs, challenges, partners, and potential risk factors for fire-related injury. We also wanted to ensure flexibility for each site in designating their Sleep Safe Coordinator. The curriculum was drafted using a format consistent with that used in other Head Start educational materials. Additionally, activities were developed to meet Head Start performance standards in community partnering and safety.

Tribal Head Start programs are solicited annually to apply for the Sleep Safe Program. The University of North Carolina School of Public Health (UNC) provided assistance with development of a one-day annual Coordinator's workshop and on-going evaluation and monitoring for Sleep Safe sites participating between 1999 - 2001. They also evaluated the Sleep Safe curriculum annually and assisted in revising the program materials.

The initial curriculum consisted of four "guides" from which feedback was obtained by conducting three focus groups (3 - 6 participants each) of Arizona tribal Head Start teachers and community members who had reviewed and applied the materials at their respective sites. Input from the focus groups was used to improve clarity, readability, ease of application,

content, and activities of the curriculum. A facilitator's guide from a resource manual previously developed through a collaborative project with the US Fire Administration to assist AI/AN communities in developing effective fire safety programs¹⁶ was used to guide the focus group sessions.

Evaluation and revision of materials are key to ensuring the effectiveness of the Sleep Safe Program. On-going review of program implementation is accomplished through interviews with coordinators, evaluation of the curriculum and annual coordinator's workshops, retrospective data review, and quality assurance (QA) visits to homes by environmental health staff. The following are core components of the Sleep Safe Program:

Community partnering. Head Start's emphasis on community partnering allows each site to take advantage of local partners that can assist in implementation of their program. Such partners include environmental health, injury prevention, public health nursing, community health representatives, housing and fire departments, Honoring our Children (a Wisconsin program), and others. These partners assist with program implementation including training, data collection and analysis, and installation of smoke alarms.

Curriculum. The original curriculum was expanded from four to eight guides (Figure 2) and is used by project coordinators and their partners in developing and implementing their local comprehensive fire safety programs.

Training. An annual two-day workshop brings coordinators and their environmental health partners together to learn program goals and objectives, and administrative and technical requirements for project implementation. After the workshop, coordinators provide training to local Head Start staff, home visitors, parents, and Head Start students.

Home visits are provided by trained visitors initially and during follow-ups 2 - 8 months later.

Installation of photoelectric smoke alarms equipped with ten-year lithium batteries. Photoelectric smoke alarms were selected due to their lower rate of nuisance alarming.^{8,9} We did not provide ionization models with hush buttons because 1) they are prone to nuisance alarming; and 2) many people tend to disable the smoke alarm rather than repeatedly activating the hush button.¹⁷ Sites prioritize installation of smoke alarms to ensure that each home has at least one working smoke alarm. Additional smoke alarms, as available, are installed on each level of the home and in sleeping rooms.

Data tracking during home visits. The one page form collects smoke alarm presence and operability data during initial and follow up visits.

Each Sleep Safe site's progress is monitored via quarterly progress reports submitted to the IHS Sleep Safe Program Coordinator. These reports provide process data such as the number of initial and follow-up home visits conducted, smoke alarm operability, number of smoke alarms installed, training provided, and descriptions of other activities conducted.

Figure 2. Core components and purpose of the Sleep Safe Program Curriculum Guides*

Curriculum Guides		
Component		Purpose
1.	Coordinator's Guide	Describes the roles and responsibilities of coordinators and EHO's in implementing program activities
2.	Environmental Health Officer (EHO) Guide	Describes how to plan an effective smoke alarm distribution program, including installation, data collection, and follow-up activities
3.	Smoke Alarm Distribution Guide	
4.	Teacher's Guide	Describes fire safety educational activities that can be provided to parents and children by Head Start teachers
5.	Staff and Childcare Provider's Guide	
6.	Children's Guide	
7.	Tribal Partnerships Guide	Describes how to expand fire safety partnerships and activities to the larger community
8.	Resource Guide	Provides additional resources and Internet sites for fire safety information and activities

*Developed by IHS, USFA, and UNC to support the Sleep Safe Program

Because the goal of the Sleep Safe Program is to ensure at least one operable smoke alarm per Head Start student, impact data tracked are the percent increase in homes with at least one working smoke alarm as determined during initial and follow-up home visits. Anecdotal stories of Sleep Safe Program-installed smoke alarms alerting residents to fire are also collected and documented.

Results

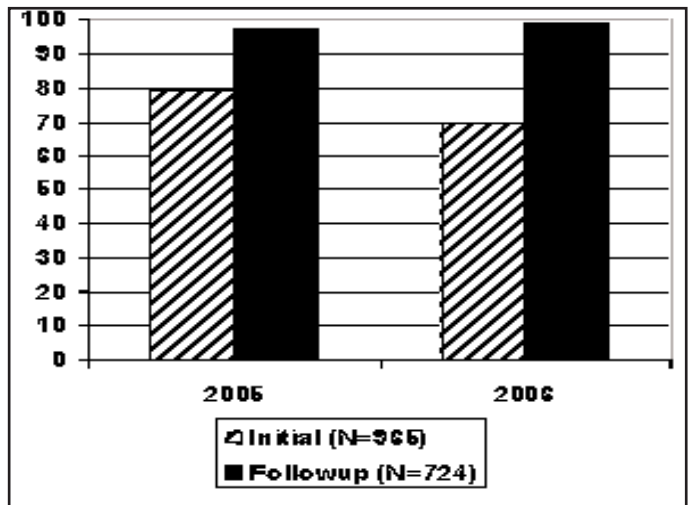
Since fall 1999, 76 tribal Head Start grantees across the country have participated in the Sleep Safe Program as new or continuing sites. These programs have distributed over 20,000 smoke alarms. The results presented below focus on the efforts of the Bemidji Area IHS in implementing this program.

From 1999 to May 2006, the Sleep Safe Program has been implemented by 20 of the 27 Bemidji Area tribes with Head Start programs. Seven of the sites participated for four or more years, two participated for six years, and four participated for only one year. Bemidji Area IHS Sleep Safe sites installed 7,125 smoke alarms. The Minnesota Department of Health provided 984 of these smoke alarms. The cost of the smoke alarms installed by BAIHS Sleep Safe sites totals an estimated \$106,876.

Prior to implementing the Sleep Safe Program in the BAIHS, we observed on several reservations that less than 50 percent of homes had at least one working smoke alarm. This is typical of sites in their first year of participation. Continuing Sleep Safe sites see many families re-enrolling their students

for several years of Head Start, and their baseline smoke alarm operability tends to increase each year. During FY2005 and FY2006, among all sites in the Bemidji Area, smoke alarm operability increased 40 percent, from a baseline of 70 percent (N=965) to 99 percent (N=724) on follow-up visits (Figure 3). Because of the documented effectiveness of smoke alarms in reducing deaths in residential fires, the observed increase in smoke alarm operability would predict a decrease in residential

Figure 3. Percentage of homes with at least one working smoke alarm, initial and follow-up home visits, Sleep Safe Program Sites



fire mortality. Among American Indian/Alaska Native children ages 0 - 4 years living in the three states of the Bemidji Area (Michigan, Minnesota, and Wisconsin), there have been only two residential fire deaths in the five-year period 2000 - 2004. This compares to ten such deaths in the five-year period (1994 - 1998) preceding the implementation of Sleep Safe in 1999.¹ In addition, we have documented five anecdotal stories of lives saved by smoke alarms installed by local Sleep Safe programs.

Success in the Sleep Safe Program spurred some sites to expand activities within their communities to other aspects of childhood injury prevention. Six Bemidji Area Tribal Head Starts were funded by BAIHS for carbon monoxide (CO) detector installation projects that they did in conjunction with Sleep Safe activities. These sites distributed 906 CO detectors, usually as incentives to ease entry into homes during follow up smoke alarm visits. One site assisted a neighboring non-Tribal Head Start in implementing the program. Interest in child passenger safety led eleven Area Tribal Head Start grantees to apply for the Ride Safe Child Passenger Safety program. This program, implemented in FY 2003, was modeled after Sleep Safe in providing curriculum, educational outreach, and in this case, child safety seat installation. In Bemidji Area, implementation of the Ride Safe Program led to increased expertise of tribes in child passenger safety by training 41 certified CPS techs who distributed over 1,000 child safety seats.

During the initial years of the Sleep Safe program, problems were encountered in the quality of data obtained from many sites, especially those that discontinued participation in the program after one or two years. These problems included 1) forms submitted with inconsistent or missing data; 2) inclusion of self-reported data; 3) failure of some home visitors to fill out some or all of their forms; and 4) forms that were lost.

Discussion

Previous smoke alarm distribution programs often saw a lack of long-term operability of the devices. Residents frequently disconnected the smoke alarm if there were false (“nuisance”) alarms, or they failed to replace a used battery. Sleep Safe addresses these problems by providing ten-year batteries and photoelectric alarms (which are less likely to nuisance alarm); educating parents about the importance of smoke alarms; and promoting parental involvement in the community fire safety effort.

Participation in Sleep Safe by tribal Head Start sites is voluntary. Successful implementation of the Sleep Safe Program varied among project sites. We sought to understand factors that contributed to sites that were able to implement the program and achieve increased smoke alarm usage. Characteristics of successful sites include a motivated coordinator; administrative support for the staff time commitment required of this program; and effective community partnering, especially with IHS or tribal

environmental health and/or injury prevention staff. Although 20 sites in Bemidji Area have participated in this program, only seven continued for at least four years. This is due in part to high rates of staff turnover; variable support from Head Start administration; competing priorities and mandates; lack of support from local Environmental Health or Injury Prevention partners; and under-estimation of the time commitment. Some sites discontinued the program after a few years because they had saturated their communities with smoke alarms.

During the early years of the program, many sites were inconsistent in the collection and submission of good quality data. The first home visit data collection form collected volumes of data, some of which were unrelated to fire safety. One copy of this form was filled out during the initial home visit, and one during the follow up visit. Forms that were received often were incomplete, with inconsistent data, and often either the initial or follow up form for any given home was missing. Because of this, the home visit data collection form was radically simplified, with coordinator’s feedback, to collect only smoke alarm installation and operability data. The two pages were combined into one page to keep initial and follow-up data together. A guide was also developed to facilitate and standardize staff training in data collection during field visits. In 2005 we implemented an on-line data collection and analysis program through *SurveyMonkey.com*. This tool has greatly improved reporting and data analysis. The data training session was expanded at the annual coordinator’s workshop, and we added a computer laboratory to teach participants data entry and analysis skills.

Random home visits for quality assurance made by a team of environmental health staff on one reservation revealed problems in home visitor standardization. Some of the home visitors had not physically tested the smoke alarms, instead they had telephoned residents or had the residents fill out their own data forms. Some home visitors installed smoke alarms incorrectly, suggesting a need for more effective training of home visitors. At one site, smoke alarms were simply handed out and not installed. We felt that these problems were due in part to lack of partnering by the site’s local environmental health or injury prevention partner and lack of adequate training of Head Start home visitors.

Local environmental health and injury prevention staff can assist their sites by providing staff and community training, assisting with data collection and analysis, and in smoke alarm installations. Because environmental health and injury prevention staff, especially early on, were not often engaged in providing assistance to their sites, we cemented the relationship between them and their site in several ways, as follows: 1) we developed an Environmental Health Officer’s (EHO) Guide to define the roles and responsibilities of EHOs to their sites; and 2) we required attendance by the EHO at the annual coordinator’s workshop. After we made the above changes to data collection and EHO partnering, we obtained our first complete data sets for BAIHS sites during FY 2005 and FY 2006.

Conclusion

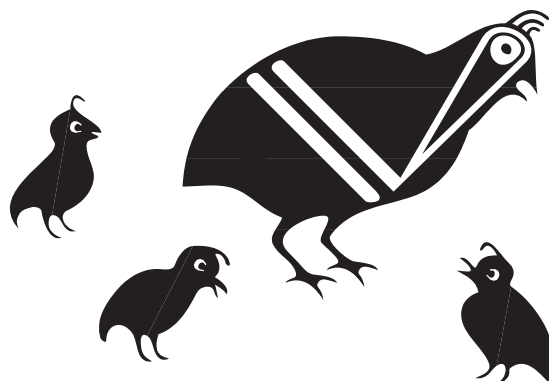
The BAIHS Injury Prevention Program recognizes that reducing injuries depends on the active involvement of communities. It aims to partner with communities to address local injury problems through locally developed solutions. We have demonstrated that the Sleep Safe Program is a promising strategy for increasing the number and operability of smoke alarms in homes of high-risk AI/AN Head Start children. It has also stimulated the development of community partnerships and expansion into other aspects of childhood injury. The Sleep Safe program can serve as a model and tool for local groups to use as a starting point for addressing fire and other injury problems in their communities.

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The Role of Technical Assistance in the IHS Tribal Injury Prevention Cooperative Agreements Program (TIPCAP): Enhancing Injury Prevention Capacity Among Tribes and Tribal Organizations.

Robert J. Letourneau, MPH, Research Associate, Department of Health Behavior and Health Education, School of Public Health, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina; and Carolyn E. Crump, PhD, Research Assistant Professor, Department of Health Behavior and Health Education, School of Public Health, The University of North Carolina at Chapel Hill

The Indian Health Service (IHS) Injury Prevention Program (IPP) provides a multifaceted approach to developing the capacity of American Indian/Alaska Native tribes and tribal organizations to address their injury problems (Table 1). In 1997, the IHS IPP established the Tribal Injury Prevention Cooperative Agreements Program (TIPCAP) to enhance tribal capacity to address high rates of injury morbidity and mortality. TIPCAP provides varying levels of funding to tribes and tribal organizations for three purposes: to facilitate injury prevention program development (Part I); implement program interventions (Part II); and conduct injury prevention conference activities (Part III). During the three funding cycles from 1997 through the present, Part I TIPCAP funding has been provided to a total of 51 tribes/tribal organizations for a total of approximately \$13.4 million (Table 2). This article describes the context and components of technical assistance provided to Part I TIPCAP sites, the lessons learned from our work, and the implications for other IHS and federal programs.

What Is the Context in Which Technical Assistance Was Provided?

To be eligible for Part I TIPCAP funding, tribes/tribal organizations must have a service population of at least 2,500 people and hire a full-time coordinator to manage the tribe's injury prevention program. Each site is assigned a local IHS staff member who serves as the site's project officer and immediate source of support and assistance. Through initial funding and annual continuation application processes, TIPCAP sites identify and prioritize local injury concerns and outline goals, objectives, activities, and program budgets to address them. Sites are encouraged to employ evidence-based injury prevention strategies.¹

Beginning in 1997, the IHS contracted with the University of North Carolina School of Public Health to provide a variety of evaluation, monitoring, and technical assistance services to support the IHS IPP. The ten-year partnership with UNC has included 1) an evaluation of the 12 IHS Area injury prevention programs; 2) an evaluation and revision of the IHS injury prevention training program; and 3) support to four national injury prevention programs including the National Indian Safe Home Coalition, Sleep Safe (fire safety), Ride Safe (child passenger safety), and the TIPCAP. During the three TIPCAP funding cycles from 1997 to the present, UNC has provided monitoring, training, and technical assistance services to tribal and IHS staff participating in the program through six activities: 1) annual site visits; 2) conference calls (2 - 3 per year); 3) project newsletters (3 - 4 per year); 4) annual training workshops; 5) on-going technical assistance and training; and 6) consultation with IHS Headquarters staff.

The IHS IPP secured UNC's support to assist TIPCAP

Table 1. IHS Injury Prevention Program approach to building AI/AN injury prevention capacity

- Direct injury prevention funding to tribes and tribal organizations
- Injury prevention training program
 - Introduction to, Intermediate, and Advanced Injury Prevention Short Courses
 - Program Development and Epidemiology year-long fellowships
- IHS injury prevention staff at the Area, district, and service unit levels to assist tribes in designing, implementing, and evaluating injury prevention programs
- Technical assistance from external academic staff

Table 2. IHS Tribal Injury Prevention Cooperative Agreements Program Part I funding summary, 1997 - present

Funding Cycle	Funding Amount	Tribes/Tribal Organizations Funded by TIPCAP	
1997-1999	\$25,000 per year for three years	1. Bristol Bay Area Health Corp., AK 2. Fort Peck Assiniboine & Sioux, MT ^a 3. Fallon Paiute-Shoshone Tribe, NV 4. Pueblo of Jemez, NM 5. Jamestown S'Klallam Tribe, WA 6. United Tribes Technical College, ND	7. Hoopa Valley Tribe, CA 8. Sac and Fox Nation, OK ^a 9. Miccosukee Corporation, FL 10. Osage Nation, OK 11. Pokagon Band of Potawatomi, MI 12. Ysleta del sur Pueblo, TX
2000-2005	\$50,000 per year for two/five years	1. Caddo Nation, OK 2. CA Rural Indian Health Board, CA 3. Chickasaw Nation, OK 4. Colorado River Indian Tribes, AZ 5. Comanche Nation, OK 6. Eastern Band of Cherokee, NC 7. First Mesa Consolidated Villages, AZ 8. Fond du Lac Band of Ojibwe, NM 9. Hardrock Chapter, Navajo Nation, AZ 10. Hoopa Valley Tribe, CA 11. Pueblo of Jemez, NM 12. Kaw Nation, OK 13. Kodiak Area Native Association, AK 14. Navajo Nation Highway Safety, AZ 15. Northern Native American Health Alliance, WI 16. Norton Sound Health Corp., AK ^b	17. Oneida Tribe of Wisconsin, WI ^b 18. Pascua Yaqui Tribe, AZ 19. Pawnee Nation, OK ^b 20. Ponca Nation, OK ^c 21. Reno Sparks Indian Colony, NV 22. Rocky Boy/Chippewa Cree, MT 23. Sisseton Wahpeton Oyate, SD ^b 24. SouthEast Alaska Regional Health Consortium, AK 25. Spirit Lake Nation, ND 26. St. Regis Mohawk, NY 27. Taking Back Our Communities, AZ ^b 28. Three Affiliated Tribes, ND 29. Trenton Indian Service Area, ND 30. United Tribes Tech. College, ND 31. Ute Tribe, UT ^b
2005-2010	\$50,000 per year for up to five years	1. Bristol Bay Area Health Corp., AK 2. Choctaw, OK 3. Indian Health Council, CA 4. Kiowa, OK 5. Norton Sound Health Corp., AK 6. Oneida Tribe of Wisconsin, WI	7. Osage Nation, OK 8. Quechan Indian Tribe, AZ 9. San Felipe Pueblo, NM 10. Sisseton Wahpeton Oyate, SD 11. Standing Rock Sioux, ND 12. Toiyabe Indian Health Project, CA 13. White Mountain Apache, AZ
	\$75,000 per year for up to five years	14. Caddo Nation, OK 15. Northern Native American Health Alliance, WI 16. CA Rural Indian Health Board, CA 17. Fond du Lac Band of Chippewa, MN	18. Hardrock Chapter, AZ 19. Pueblo of Jemez, NM 20. Kaw, OK 21. Navajo Highway Safety Program, AZ 22. SouthEast Alaska Rural Health Consortium, AK

^a Initial project funding began in July 1998.

^b Six sites received funding for only two years (2003-2005)

^c Funded only from 2000-2002

sites in designing and implementing effective injury prevention activities. Ten years of continuous work with various facets of the IHS IPP, particularly TIPCAP, has allowed UNC to understand program goals and proactively provide relevant guidance for improvements. UNC project team members have sought to establish effective relationships with those working in AI/AN communities by emphasizing rapport-building activities, active listening, acknowledging local expertise, and awareness of cultural appropriateness in communications.

Table 3. General skills enhanced by technical assistance

1. Writing specific and measurable objectives
2. Employing evidence-based, effective strategies
3. Planning multi-level injury prevention approaches (e.g., education, environmental modification, enforcement)
4. Collecting data to address objectives
5. Writing effective progress reports

What Components Are Important to Providing Technical Assistance?

It is important to devote time to build relationships by listening and learning how the tribes' injury prevention and other programs are managed. This requires that we both understand and appreciate contextual factors (e.g., administrative, economic, political, or social) with which the injury prevention coordinator must work when conducting injury prevention program planning, implementation, and evaluation. The technical assistance we provide must also be responsive to the immediate needs and interests of the coordinator. Identifying and considering site-specific issues ensures that we avoid making incorrect assumptions about how the coordinator may be able to manage the injury prevention program.

Before providing technical assistance related to the tribe's injury prevention program, we must understand its approach to reducing injuries. Careful review of the sites' funding applications (initial/continuation) and progress reports, with clarification from coordinators, enables us to plan and conduct effective conference calls and on-site visits. Site visits afford the most significant opportunity to provide technical assistance to coordinators and project officers. To enhance on-site assistance, we also ask coordinators to complete a technical assistance site visit planning survey. In addition, prior to the annual TIPCAP workshop, attendees complete a needs assessment to inform the workshop agenda topics and to prioritize knowledge and skill-building activities. Consistent assessment and feedback through these mechanisms has helped us to identify and better meet program-wide and site-specific technical assistance needs.

We plan our technical assistance efforts to increase knowledge (e.g., effective injury prevention strategies), and more importantly, to enhance skills among coordinators and project officers. Skill-building assistance has focused on five general areas (Table 3). We have also supported coordinators' abilities to conduct local training activities through their involvement in planning committees for the annual workshop. Coordinators and project officers actively participate in the processes of planning, implementing, and evaluating the annual workshop, which also helps to build public speaking and presentation skills. In addition, coordinators reinforce writing, marketing, and advocacy skills with submissions to the TIPCAP newsletter, presentations at local or national conferences/meetings, and progress reporting. Based on our understanding of a common set of needs across multiple sites, we also developed specific tools to assist program coordinators and project officers (Table 4). In addition, we facilitated a two-year process, involving retrospective data analysis and prospective data collection, working with 17 tribes to develop and pilot-test a protocol for collecting valid observational seatbelt use survey data, which has since been adopted by tribal and IHS staff in several IHS service Areas.²

Table 4. Specific Tools Provided to Address Technical Assistance Needs

- | |
|---|
| <ol style="list-style-type: none">1. Project reporting templates2. Program planning/evaluation worksheets3. Site progress/monitoring templates (tables, graphs)4. Budget monitoring spreadsheets5. Protocol for IHS staff to use with sites experiencing challenges to program implementation |
|---|

Throughout all of our work, we have found it valuable to provide clear, consistent, and constructive messages that are reinforced in multiple ways. We communicate messages verbally during conference calls, site visits, and workshops, as well as in written form in newsletters, detailed conference call/site visit summaries, and supplemental handouts. We ensure that various staff involved with a program, including coordinators, supervisors, project officers, and IHS Headquarters staff receive our written feedback.

During the 2000 - 2005 TIPCAP funding cycle, our efforts to provide consistent technical assistance benefited from the development and use of a conceptual model that guided data collection and analysis and allowed us to assess the degree to which TIPCAP was successful in increasing injury prevention capacity, the program's stated purpose. Outlined in detail in our final report, available on the IHS IPP website, <http://www.ihs.gov/MedicalPrograms/InjuryPrevention/index.cfm>, we measured capacity building using data from document reviews, on-site visits, conference calls, and multiple surveys.³ We summarized data across five components: 1) program support; 2) program staffing; 3) program management; 4) intervention activities; and 5) degree of progress. An overall site summary measure was developed (advanced, intermediate, basic) to allow comparison within and across sites. Our efforts led to the provision of 18 recommendations for the TIPCAP to consider during future funding cycles, some of which are referenced in the next section. IHS Headquarters staff can use results from our data collection/analysis to advocate for continued or enhanced support for TIPCAP.

What Have We Learned from Our Work?

Technical assistance is more likely to be effective if it is based on a long-standing relationship of trust, is flexible, and is tailored to program coordinators' needs.⁴ This is particularly true among AI/AN communities that may have had negative experiences with outside experts entering a community, often bringing assumptions and expecting collaboration. We agree that it takes at least two years to develop positive working relationships with AI/AN tribal representatives.⁵ Our ten years of work with and for tribal communities has afforded us the unique opportunity to work on-site with over 100 tribes/tribal organizations across the US. This longevity and on-site work has greatly informed the types of technical assistance we are able to provide, the ways in which we provide it, and how our assistance and advice may be received in tribal communities and among IHS staff.

TIPCAP sites are funded as cooperative agreements, which include reporting requirements and assistance provided by project officers, with additional oversight from the IHS Headquarters program and contracts and grants office staff during continuation application processes. Sites have been encouraged to develop their programs to best meet local needs. We have recommended that TIPCAP enhance the ability of the program, overall, to assess its impact by 1) providing greater support and oversight for the development of comprehensive (e.g., process and impact) and well-constructed objectives (e.g., specific, measurable, time-specific); 2) ensuring complete and timely submission of standardized project reporting to capture similar information across sites; and 3) assessing annually the extent to which coordinators and project officers believe progress in meeting objectives has occurred. For the 2005 - 2010 funding cycle we are also recommending that sites develop logic models to provide an overview of their programs.^{6,7} We anticipate that by developing logic models, sites will specify enhanced program objectives, conduct more focused interventions, and better understand the need to collect data to measure short and medium term impacts (e.g., changes in knowledge, behaviors, policies).

Similar to challenges experienced by other programs or organizations, TIPCAP has endured discontinuity in program leadership and oversight from IHS Headquarters. Such organizational challenges have put additional responsibilities on project officers, some of whom have limited experience in providing technical assistance/oversight, are geographically isolated from a site, and/or face budget constraints limiting on-site visits. While it has been effective to have an external group such as UNC provide on-going monitoring and technical assistance services, project officers bear primarily responsibility for local assistance and oversight and may need additional support to do this more effectively. TIPCAP's annual continuation application process allows project officers to formally provide recommendations and/or request special conditions regarding site work plans, objectives, and/or activities. This process could be strengthened with improved communication and agreement across the administrative units at IHS (e.g., Headquarters contracts and grants, Headquarters IPP staff, and project officers). An improved process should ensure that sites are both identifying and meeting well-stated and measurable objectives, something to which the TIPCAP program aspires.

The skills required of a coordinator to develop a comprehensive injury prevention program are substantial. We have learned that technical assistance must be defined broadly, going beyond discussions of effective injury prevention strategies and skill development in program planning, implementation, and evaluation. Technical assistance for injury prevention also includes the skills and sensibilities necessary to establish and maintain program partnerships that can result in changes at the individual, environment, and policy-levels. In some tribal communities, a history of inter or cross-departmental tensions limits collaborative relationships needed for community-based injury prevention programs. Therefore, an injury prevention

coordinator must possess both the knowledge to plan effective prevention strategies and skills in communication, coalition building, and marketing/advocacy. We have proactively provided a wide range of skill development activities to those involved with TIPCAP. To address unintentional injuries (e.g., due to motor vehicle crashes), coordinators must have the skills to accomplish multi-level community-based interventions, which are different from prevention strategies used in more traditional clinical or health education programs. These skills include 1) providing education directly to community members to increase knowledge/skills (e.g., using one-on-one or media channels); 2) working with highway/road departments to identify and make improvements to roadways; and 3) working with tribal and municipal/state law enforcement, tribal judicial staff (judges, prosecutors), and tribal decision-makers to enhance and/or enforce existing traffic safety laws/policies. When addressing intentional injuries (e.g., homicide, suicide), coordinators must develop partnerships with medically-based treatment disciplines as well as criminal justice system partners to address complex human, behavioral, and social conditions in tribal communities.

The types of assistance we provide must be appropriate for the experience and skills of TIPCAP coordinators. In some cases, we have also been asked to provide skill-building activities for others working with the coordinator (e.g., coalition members, colleagues, supervisors). More importantly, as outsiders, we have also learned the importance of understanding when and how to offer suggestions, how to diffuse conflict, and when to admit mistakes and accept differences of opinion. When waiting for and addressing technical assistance requests, we must exercise patience, especially when we are initially establishing relationships with coordinators and project officers.

In addition to the annual workshop evaluation, we have found it important to regularly survey and summarize satisfaction with our technical assistance services to ensure they were meeting local-level needs. On-going and meaningful self-reflection is essential and has enabled us to make improvements to the services provided to TIPCAP. For example, as a result of both feedback and our experience, we now conduct full-day site visits (instead of half-day visits) to allow for more on-site time for discussion and skill-building, and in 2005, we initiated group-format site visits for sites within geographic proximity to each other. We also recommended periodically conducting group-format conference calls to better facilitate networking among sites, which added to other networking and skill-building opportunities coordinators were provided to publicly speak about their multi-year injury prevention program efforts (e.g., at group-format site visits, annual workshops, and for other conferences).

What Are the Implications for Other IHS and Federal Programs?

There are advantages to contracting external organizations for technical assistance. They often have more current technical knowledge, a broader array of skills and expertise on staff, and

the ability to respond quickly to address situations that require immediate attention.⁴ External organizations do not supervise the program; therefore staff may be willing to reveal program weaknesses and explore solutions.⁴ To provide tailored technical assistance, we recommend establishing long-term partnerships (if possible) with external organizations by emphasizing rapport-building; continuously reflecting on how services are provided; and communicating program progress, responsibilities, and recommendations in ways that are clear, consistent, and realistic. Technical assistance is also enhanced with staff continuity over time. For example, two UNC team members have been involved throughout the ten years of collaboration with tribes/IHS. This continuity of experience has allowed for long-term vision, a deep understanding of the program, and time to improve on services. During the 2000 - 2005 TIPCAP funding cycle, the program invested between 10 to 15 percent of its budget to external technical assistance. This important investment is appropriate, considering the TIPCAP budget and the burden that injuries have in Indian Country.

Federal or state programs that provide funding to multiple sites, particularly those that involve cooperative agreements, can benefit from the approach used by TIPCAP. In particular, programs that provide input, oversight, and technical assistance to funded sites will benefit from using a continuous improvement process. We encourage other programs to pay careful attention to 1) understanding local-level/contextual issues; 2) regularly assessing coordinator and project officer technical assistance needs; 3) meeting those needs by providing clear, consistent, and tailored technical assistance; and 4) finding ways to summarize program information by and across sites in order to communicate program impact to decision- and policy-makers.

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Pathways Into Health

Clinical Laboratory Science Program

What is Pathways Into Health?

Pathways Into Health is a unique and innovative health Sciences professional education program focused on the education needs of American Indian and Alaska Native students and the health care needs of American Indians and Alaska Native communities. Pathways Into Health is a growing collaboration between Tribes, Tribal organizations, Tribal colleges, the Indian Health Service. Universities and other organizations.

Contacting Ciciley Littlewolf is the best way to answer your questions and review what is required for the program. Contact: Ciciley.Littlewolf@usd.edu or call 605-677-5167

Visit our website @ www.pathwaysintohealth.org

What is the CLS Program?

Clinical Laboratory Scientists (CLS), sometimes referred to as Medical Technologists, are key members of the health care team. They are responsible for the clinical laboratory testing which provides the physician with the necessary information to make an accurate diagnosis.

The medical field is currently experiencing a shortage of these CLS professionals. This shortage promises a bright future for qualified individuals in a fascinating field.

Now what?

The program is flexible enough to meet an individual's unique circumstances, tailored to meet academic requirements, and offers a convenient schedule! If you are interested in medicine and the sciences, it may just what you have been looking for!

MEETINGS OF INTEREST □

Available EHR Courses

EHR is the Indian Health Service's Electronic Health Record software that is based on the Resource and Patient Management System (RPMS) clinical information system. For more information about any of these courses described below, please visit the EHR website at http://www.ihs.gov/CIO/EHR/index.cfm?module=rpms_ehr_training. To see registration information for any of these courses, go to <http://www.ihs.gov/Cio/RPMS/index.cfm?module=Training&option=index>.

4th Annual Phoenix Area Behavioral Health (and Maternal Child Health) Conference August 7 - 9, 2007; Phoenix, Arizona

The 4th Annual Phoenix Area Behavioral Health and Maternal Child Health Conference will be held at the Four Points Sheraton, 10220 N. Metro Parkway E., Phoenix, Arizona 85051, telephone (602) 997-5900.

Through plenary and break-out sessions, this conference is designed to present an integrated approach to current health issues for American Indians/Alaska Natives in the Phoenix Area. Topics to be covered include substance abuse during pregnancy, fetal alcohol syndrome, ethics, telehealth, suicide risk assessment and prevention tools, family treatment, and treatment of childhood trauma.

A block of fifty rooms has been set aside at a rate of \$74 per night plus tax (this is the approved Federal government rate and will include a breakfast buffet). Please call (800) 368-7764 or (602) 331-9873 for room reservations and mention that you will be attending the "IHS Behavioral Health Conference." (Please note: if you are planning to arrive early or stay longer than the conference dates, it is recommended to call the local hotel phone number and not the 800 number).

For more information about the event, contact Dave Atkins, (602) 364-5159, Dave McIntyre (602) 364-5183, Linda Westover (602) 364-5157, Delmar Boni (602) 364-5196, Lavern Hilt (602) 364-5168, or Roy Teramoto (602) 364-5175.

2007 Native Women's Health and MCH Conference August 15 - 17, 2007; Albuquerque, New Mexico

Do you provide care to Native American women of all ages? Are you interested in the latest program/clinical updates? If so, you should seriously consider attending the Native Women's Health and MCH Conference in Albuquerque, New Mexico August 15 - 17, 2007. The theme is "Improve the System: Improve the Outcome." It will feature internationally known speakers, as well as national benchmark organizations, e.g., Institute for Healthcare Improvement and Kaiser Family Foundation.

The Conference also has a program review function, so there should be a team from each facility that provides care to women of any age, whether outpatient only, or full spectrum care. This meeting only happens every three years.

Conference coordination is by the University of the New Mexico Department of Continuing Education. The Program is available at <http://www.ihs.gov/MedicalPrograms/MCH/F/CN01.cfm#Aug07>. For questions, contact Kathy Breckenridge at UNM CME at KBreckenridge@salud.unm.edu, or call (505) 272-3942. Other questions, contact Neil Murphy at nmurphy@scf.cc.

Seventh International Conference on Diabetes and Indigenous Peoples

August 29 - September 1, 2007; Ottawa, Ontario, Canada

This conference has been cancelled.

Ninth Annual American Indian Elders Conference September 5 - 7, 2007; Oklahoma City, Oklahoma

The Indian Health Service is once again sponsoring the Annual American Indian Elders Conference; this year's theme is "Enjoying the Circle of Life." Participants will explore new pathways for better health and provide positive examples for generations to follow. The conference will be held September 5 - 7, 2007 at the Crowne Plaza, Oklahoma City, Oklahoma. Onsite registration will begin in the afternoon on Tuesday, September 4.

The American Indian Elders Conference provides information on health education and wellness and recognizes the need to keep traditions and traditional values alive. Each year the planning committee selects issues affecting elders and invites participation from American Indian Communities across the nation. Presentations will focus on various health-related issues including fitness, cancer, heart disease, diabetes, and mental health. Social issues such as domestic violence in Indian country and grandparenting will also be addressed. In addition, Veterans issues will be explored and recognition will be given for their many sacrifices.

For more information visit www.katcommunications.net/conferences, where you may register for this conference and subscribe to receive conference updates by e-mail. Alternatively, you may call KAT Communications at (888) 571-5967.

ACOG/IHS Denver Course in Obstetric, Neonatal and Gynecologic Care

September 16 - 19, 2007; Aurora, Colorado

This annual women's health update for nurses, advanced practice nurses, and physicians provides a three-day schedule of lectures, workshops, hands-on sessions, and team building.

The large interdisciplinary faculty collaborates to teach clinical and practical topics as they apply in Indian health settings. Many faculty members are your colleagues in IHS and tribal facilities; private sector faculty also bring a wide range of experience providing Indian health care.

Learn the latest evidence-based approaches to maternal and child health services, and share problems and solutions with your colleagues from across Indian country. The course can also serve as a good foundation for professionals who are new to women's health care or new to the Indian health system.

In addition to the basic course, you may sign up for the Neonatal Resuscitation Program, and come away with your certificate from this convenient pre-course program. The opportunity to fulfill continuing education requirements in a concentrated format is significant; with the optional NRP, we can document your participation in seven half-days of education.

Sign up early! You'll have first chance for support from your facility and coverage for your time in Denver. Getting these benefits lined up takes time, so don't delay and miss out! In addition, early registration holds your place, and puts you in line for possible availability of scholarship funds.

Watch your mail for the course brochure and registration form, or contact Yvonne Malloy at ymalloy@acog.org for additional information.

The AHRQ Annual Meeting for Health Information Technology September 26 - 28, 2007; Bethesda, Maryland

Designed for physicians, nurses, and researchers, the Agency for Healthcare Research and Quality's (AHRQ) Annual Meeting is a CME/CEU accredited meeting that will feature AHRQ's work across several programs, and provide an opportunity to network with peers/colleagues on health IT, patient safety, and quality of care issues, update knowledge of current health trends and issues, enhance skills to improve patient care, and receive accredited continuing education. The program will offer continuing education designed to meet the needs of those providing primary and specialty care to special populations in the US, including the uninsured and Medicaid populations, women and children, persons with chronic illnesses, and racial and ethnic minorities including American Indians and Alaska Natives. The seminar will be held at the Bethesda North Marriott Hotel and Conference Center, 5701 Marinelli Road, Bethesda, Maryland 20852; telephone (301) 822-9200. The CME/CEU accredited sessions will be offered on Wednesday, September 26. The meeting agenda will include plenary and concurrent sessions on a variety of topics. Registration information will be available soon.



POSITION VACANCIES □

Editor's note: As a service to our readers, THE IHS PROVIDER will publish notices of clinical positions available. Indian health program employers should send brief announcements on an organizational letterhead to: Editor, THE IHS PROVIDER, The IHS Clinical Support Center, Two Renaissance Square, Suite 780, 40 North Central Avenue, Phoenix, Arizona 85004. Submissions will be run for two months, but may be renewed as many times as necessary. Tribal organizations that have taken their tribal "shares" of the CSC budget will need to reimburse CSC for the expense of this service. The Indian Health Service assumes no responsibility for the accuracy of the information in such announcements.

Multiple Professions

Pit River Health Service, Inc.; Burney, California

Pit River Health Service is an IHS funded rural health clinic under P.L.93-638 in northern California that provides medical, dental, outreach, and behavioral health. We are seeking several professional positions to be filled. We are looking for a Health Director to administer and direct the program to fulfill the Pit River Health Service, Inc.'s primary mission of delivering the highest possible quality of preventative, curative and rehabilitative health care to the Indian people served; a Dental Director to plan and implement the dental program and supervise dental staff; a Public Health Nurse or Registered nurse seeking a PHN license to provide public health nursing and to coordinate and supervise Community Health Services program; a Behavioral Health Director/LCSW as an active member of an interdisciplinary team providing prevention, intervention, and mental health treatment services to clients; and a Registered Dental Assistant.

Burney is located about 50 miles northeast of Redding, California in the Intermountain Area. The Intermountain Area offers plenty of recreational opportunities such as fishing, hiking, camping, boating, and hunting, with a beautiful landscape. Snow skiing is within an hour's drive away. The Intermountain Area is a buyers market for homes, as well. All available positions require a California license and/or certification. To apply for employment opportunities and for more information, please contact John Cunningham; e-mail johnc@pitriverhealthservice.org; or telephone (530) 335-5090, ext. 132.

Mid-Level Provider

Sam Hider Community Clinic; Jay, Oklahoma

The Sam Hider Community Clinic has an immediate opening for a full-time nurse practitioner and/or physician assistant. This facility, located in Jay, is one of six rural ambulatory clinics operated by the Cherokee Nation and is located 15 minutes south of Grand Lake, Oklahoma's largest recreational lake. Other services offered at this facility include dental, radiology, public health nursing, in-depth diabetes

program, pharmacy, and laboratory. Cherokee Nation offers competitive salaries, excellent benefits, loan repayment options, no weekends, no call, and relocation expenses are available.

If interested in this exciting opportunity, please submit a completed Cherokee Nation application along with copies of degrees and/or certificates to Cherokee Nation Health Administration Office, Attn: Kathy Kilpatrick or Angie Cone, PO Box 948, Tahlequah, Oklahoma 74465; telephone (918) 453-5000; fax (918) 458-6174; or e-mail kathy-kilpatrick@cherokee.org or angie-cone@cherokee.org. We would also like to extend an invitation to come and visit our clinic – we feel confident you'll love our charming southern hospitality!

For more detailed information regarding job listings and for an application, log onto our website at www.cherokee.org. Applicants with Indian preference must submit a copy of their Certificate Degree of Indian Blood (CDIB) along with their application. All applicants will be required to pass a pre-employment drug screen and complete a background check.

Psychiatrist

Winslow Indian Health Care Center; Winslow, Arizona

The Winslow Indian Health Care Center (WIHCC) in northern Arizona is currently looking for a psychiatrist. The psychiatrist works as part of a team at WIHCC providing behavioral health services primarily to Navajo and Hopi patients, and the practice is mostly out-patient with occasional hospital consults. Additional staff consists of one full-time psychiatric nurse practitioner, another (part-time) psychiatrist, and five Navajo counselors. The call schedule is rotated between staff, and is very reasonable. WIHCC has a medical staff of 12 primary care physicians, a surgeon, and eight family nurse practitioners, and offers comprehensive ambulatory and urgent/emergent care to patients at our health center in Winslow, and two field clinics on the Navajo Reservation. Our physicians provide in-patient care at the local community hospital, Little Colorado Medical Center.

Winslow offers an awesome mix of professional, cultural, and recreational opportunities. WIHCC is located just seven miles from the breathtaking beauty of Navajoland and its people, and 50 miles from Flagstaff – a university town with extensive downhill and cross-country skiing, where several of our employees choose to live. Attractive salary and benefits, as well as a team oriented, supportive work environment are key to our mission to recruit and retain high quality professional staff.

WIHCC became an ISDA 638 contracted site in 2002, and has experienced steady growth and enhancement of programs and opportunities since the transition from a direct IHS program. Please contact Frank Armao, MD, Clinical Director, if you are interested in pursuing an opportunity here; e-mail frank.armao@wihcc.org; telephone (928) 289-6233.

Family Practice Physician

Peter Christensen Health Center; Lac du Flambeau, Wisconsin

The Peter Christensen Health Center has an immediate opening for a board certified family practice physician; obstetrics is optional, and call will be 1/6. The facility offers competitive salaries, excellent benefits, and loan repayment options; all within a family oriented work atmosphere.

The Lac du Flambeau Indian Reservation is located in the heart of beautiful northern Wisconsin. The area's lakes, rivers, and woodlands teem with abundant wildlife, making it one of the most popular recreational areas in northern Wisconsin. The area boasts fabulous fishing, excellent snowmobiling, skiing, hunting, golf, and much more. Four seasons of family fun will attract you; a great practice will keep you.

For specific questions pertaining to the job description, call Randy Samuelson, Clinic Director, at (715) 588-4272. Applications can be obtained by writing to William Wildcat Community Center, Human Resource Department, P.O. Box 67, Lac du Flambeau, Wisconsin 54538, Attn: Tara La Barge, or by calling (715) 588-3303. Applications may also be obtained at www.lacduflambeauribe.com.

Primary Care Physician

Zuni Comprehensive Community Health Center Zuni, New Mexico

The Zuni Comprehensive Community Health Center (Zuni-Ramah Service Unit) has an opening for a full-time primary care physician starting in January 2008. This is a family medicine model hospital and clinic providing the full range of primary care — including outpatient continuity clinics, urgent care, emergency care, inpatient (pediatrics and adults) and obstetrics — with community outreach, in a highly collaborative atmosphere. For a small community hospital, we care for a surprisingly broad range of medical issues. Our professional staff includes 14 physicians, one PA, one CNM, a podiatrist, dentists, a psychiatrist, a psychologist, optometrists, physical therapists, and pharmacists. Our patient population consists of Zunis, Navajos, and others living in the surrounding area.

Zuni Pueblo is one of the oldest continuously inhabited Native American villages in the US, estimated to be at least 800 - 900 years old. It is located in the northwestern region of New Mexico, along the Arizona border. It is high desert, ranging from 6000 - 7000 feet elevation and surrounded by beautiful sandstone mesas, canyons, and scattered sage, juniper, and pinon pine trees. Half of our medical staff has been with us for more than seven years, reflecting the high job and lifestyle satisfaction we enjoy in this community.

For more information, contact John Bettler, MD at (505) 782-7453 (voice mail), (505) 782-4431 (to page), or by e-mail at john.bettler@ihs.gov. CVs can be faxed to (505) 782-4502, attn: John Bettler.

Primary Care Physicians

(Family Practice, Internal Medicine, Med-Peds)

Chinle Service Unit; Chinle, Arizona

Got Hózhó? That's the Navajo word for joy . . . Here on the Navajo Reservation, there's a great mix of challenging work and quality of life. No rush hour traffic, no long commutes, no stressors of urban life. We walk to work (naanish) and enjoy living in our small, collegial community. Our 60-bed, acute care hospital is located in Chinle, Arizona — the heart of the Navajo Nation.

At work we see unique pathology, practice evidence-based medicine, and are able to utilize the full scope of our medical training. Together, we enjoy learning in an atmosphere of interdepartmental collaboration, supported by an established network of consulting specialists across the southwest. A comprehensive system of preventive programs and ancillary services allows us to provide the best possible care for our patients.

During our time off, many of us explore the beautiful southwest, bike on amazing slick rock and ski the slopes of the Rocky Mountains. It's a great life — combining challenging and interesting work with the peaceful culture of the Navajo people and the beautiful land of the southwest.

We're looking for primary care physicians to join our team. If you're interested in learning more about a place where "naanish baa hózhó" (work is joyful), contact Heidi Arnholm, Medical Staff Recruiter, Chinle Service Unit, telephone (928) 674-7607; e-mail heidi.arnholm@ihs.gov.

Clinical Director, MD or DO

Puyallup Tribal Health Authority; Tacoma, Washington

The Puyallup Tribal Health Authority, a tribally operated ambulatory clinic located in Tacoma, Washington, is recruiting for a clinical director. PTHA is an urban based clinic located 30 miles south of Seattle, just off of Interstate 5. Our campus houses three buildings providing mental health, a 30-day inpatient chemical dependency program, a 13-chair dental department, dental lab, physical therapy, x-ray, pharmacy, community health, medical, medical lab, and a dedicated pediatrics department. The medical department currently has nine physicians, one PA, and five RNs.

The clinical director will be responsible for directing and managing all Puyallup Tribal Health Authority's medical clinic operations, ensuring delivery of effective health care as well as providing professional health care services directly to PTHA patients. PTHA is accredited by AAAHC, CARF (Behavioral Health), and COLA (Medical Lab). For more information, please e-mail hr@eptha.com; website www.eptha.com; fax (253) 593-3479; or call (253) 593-0232, ext. 516. The mailing address is Puyallup Tribal Health Authority, attention: Human Resources, 2209 E 32nd St, Tacoma, Washington 98404.

Family Practice Physician

Family Practice Medical Director

Tanana Chiefs Conference, Chief Andrew Isaac Health Center; Fairbanks, Alaska

We are seeking a board certified family practice physician, preferably with obstetrics skills for a full-time position. We will have openings in the summers of 2007 and 2008.

The facility is a multispecialty clinic providing services in obstetric/gynecology, internal medicine, and family practice. It also includes dental, optometry, pharmacy, behavioral health, community health aides, and other services. Our referral region includes 43 villages in interior Alaska covering an area the size of Texas. Fairbanks has an outstanding school system and university. We offer a very competitive salary with a great benefits package and a loan repayment plan. Commissioned Corps positions are also available. Contact Jim Kohler at (907) 459-3806 or james.kohler@tananachiefs.org.

Family Practice Physician Seattle Indian Health Board; Seattle, Washington

Full Time, Fantastic Benefits! We are recruiting for a family practice physician to join our team at the Seattle Indian Health Board in Seattle, Washington. We are a multiservice community health center for medical, dental, mental health, substance abuse, and community education services. We are looking for a physician who is familiar with health and social issues facing American Indians/Alaska Natives and a desire to promote the delivery of appropriate health services to this population.

Seattle Indian Health Board (SIHB) physicians are responsible for the delivery of quality, culturally sensitive primary medical care to the SIHB's patient population. This position provides general medical care (including diagnosis, treatment, management, and referral) to SIHB patients with acute, chronic, and maintenance health care needs. The physician chosen will also participate in the medical on-call rotation schedule and other responsibilities such as consulting and coordinating care with other practitioners, nursing, pharmacy, laboratory, and outside referral sites. He or she will provide clinic preceptorship of mid-level practitioners and patient care instruction to nurses, pharmacists, and other SIHB clinical staff. The incumbent will precept for residents for the outpatient continuity family practice clinics. In addition to supervising patient care, preceptors engage in didactic activity to enhance resident learning. The physician will also participate in quality assurance, program development, community health education/screening, and related activities. He or she will document all patient care information/treatment in problem-oriented format in the patient's medical records, as well as complete and submit encounter forms and related materials according to established procedure. Finally, the person selected will comply with SIHB policies and procedures, and the AAAHC Standards of Care.

Qualifications include board certification in family medicine and a Washington State medical license. All applicants will be required to complete a background check. Please visit our website at www.sihb.org for more information, or you can call Human Resources at (206) 324-9360, ext. 1123.

Primary Care Physicians USPHS Claremore Comprehensive Indian Health Facility; Claremore, Oklahoma

The USPHS Claremore Comprehensive Indian Health Facility

has openings for full-time positions for an emergency medicine physician, a surgeon, an anesthesiologist (or nurse anesthetist), an OB/GYN physician, and an internal medicine physician.

The Claremore hospital is a 50-bed specialty based comprehensive care facility, providing care through nine organized clinical services: community health, dentistry, optometry, emergency medical services, general surgery, internal medicine, obstetrics and gynecology, pediatrics, and radiology. In addition, the hospital has a six-bed intensive and coronary care unit and CAT scan equipment with 24 hour teleradiology support. The facility maintains several academic affiliations, and has a professional staff consisting of 36 staff physicians, approximately 60 contract physicians, five dentists, three nurse practitioners, a physician assistant, an optometrist, and an audiologist.

Claremore is a town of 18,000 just 21 miles northeast of the very metropolitan city of Tulsa, with a US Census county population of 560,431. Tulsa has a major airport with international flights and destinations in most major US cities, and was ranked in the top 10 southern cities in Southern Living magazine and Fodor's Travel Publications as one of its outstanding travel destinations. Tulsa's cost of living is 8 percent below the national average and has a county per capita income 11 percent above the national average. If you prefer rural living, there are many opportunities nearby. The facility is located 10 minutes from a major lake, and only one hour from a lake with over 1,100 miles of shoreline.

For more information, contact Paul Mobley, DO at (918)342-6433, or by e-mail at paul.mobley@ihs.hhs.gov. CVs may be faxed to (918) 342-6517, Attn: Paul Mobley, DO.

Family Practice Physician Hopi Health Care Center; Polacca, Arizona

The Hopi Health Care Center currently has openings for family practice physicians and family nurse practitioner or physician assistants. The Hopi Health Care Center is a small, rural IHS hospital providing full spectrum family practice medical services including ambulatory care, adult/peds inpatient care, low risk obstetrics, and ER care. We currently staff for 12 full time physicians, and four full time FNP/PA positions. Our facility is located in northern Arizona, 90 miles northeast of Flagstaff and 70 miles north of Winslow, on the Hopi Indian Reservation. Services are provided to both Hopi and Navajo reservation communities. The reservation is located in the heart of the southwest; within a 90 mile radius are abundant mountain areas, lakes, forests, and archeological sites. The Hopi Health Care Center is a new facility established in 2000 with a full ambulatory care center environment including a dental clinic, physical therapy, optometry, and behavioral health services. We are a designated NHSC site, and qualify for the IHS Loan Repayment Program.

For more information, please contact Darren Vicenti, MD, Clinical Director at (928) 737-6141 or darren.vicenti@ihs.gov. CVs can be faxed to (928) 737-6001.

Physicians Lower Brule, South Dakota

The Lower Brule Health Center is seeking two physicians in family practice or internal medicine to examine and diagnose the health related conditions of the Native American patients requesting care. Our clinic services provide mainly family practice, preventive, and some urgent care. Qualifications: must have board certification and continuously maintain a medical license. These positions are Monday thru Friday 8 am to 4:30 pm with no on-call responsibility. Salary is commensurate with education and experience. Loan repayment is available. The Lower Brule Health Center offers an excellent benefit package including dental, medical, retirement, and vacation. For more information call Georgia Amiotte, CEO or Steve Gray, PharmD, RPh at (605) 473-8248 or (605) 473-8226; or e-mail at Georgia.Amiotte@IHS.gov or stevegray2475@yahoo.com.

Family Practice Physician Chief Redstone Health Clinic, Fort Peck Service Unit, Wolf Point, Montana

We are announcing a job opportunity for a family practice physician at the Chief Redstone Clinic, Indian Health Service, Fort Peck Service Unit in Wolf Point, Montana. This is a unique opportunity for a physician to care for individuals and families, including newborns, their parents, grandparents, and extended family. Applicants must be culturally conscious and work well within a team environment. The Fort Peck Service Unit is located in the northeast corner of Montana along the Missouri river. Fort Peck Service Unit has two primary care clinics, one in the town of Poplar and one in the town of Wolf Point.

Our Medical Staff is composed of five family practice physicians, two internal medicine physicians, one pediatrician, one podiatrist, and four family nurse practitioners/physician assistants. We have a full complement of support services, which include dental, optometry, audiology, psychology, social work, radiology, lab, public health nursing, and a very active Diabetes Department. These are ambulatory clinics; however our providers have privileges in the local community hospital. We have approximately 80,000 patient contacts per year. We work very closely with the private sector. IHS and the private hospital have a cardiac rehabilitation center. By cooperating with IHS, the hospital has been able to get a CT scanner and a mammography unit. Tribal Health has a dialysis unit attached to the Poplar IHS clinic. Customer service is our priority. The IHS has excellent benefits for Civil Service and Commissioned Corps employees. There are loan repayment options, and we are a designated NHSC site. We strive to provide quality care through a strong multidisciplinary team approach; we believe in being closely involved in our population to encourage a "Healthier Community."

There are many opportunities for recreation, as we are a short distance from the Fort Peck Dam and Reservoir. For more information about our area and community please go to the website at <http://www.ihs.gov/FacilitiesServices/AreaOffices/Billings/FtPeck/in>

dex.asp. Fort Peck tribes also can be found on www.fortpecktribes.org, and the Fort Peck Community College on www.fpcc.edu. Northeast Montana offers many amenities one might not expect this far off the beaten path. If you are interested please contact our provider recruiter, CDR Karen Kajiwara-Nelson, MS, CCC-A, at (406) 768-3491 or by e-mail at karen.kajiwara@ihs.gov. Alternatively, you can contact Dr. Craig Levy at (406) 768-3491, or e-mail craig.levy@ihs.gov, or the Billings Area Physician Recruiter, Audrey Jones, at (406) 247-7126 or e-mail audrey.iones@ihs.gov. We look forward to communicating with you.

Pediatrician Family Practice Physician Pharmacist Obstetrician/Gynecologist PHS Indian Hospital; Browning, Montana

The Blackfeet Service Unit is recruiting for health practitioners who want to join the staff at the PHS Indian Hospital, Browning, Montana. The Blackfeet Service Unit is home to the Blackfeet Community Hospital, a 27-bed hospital, active outpatient clinic, and well-equipped emergency department. Inpatient care includes obstetrics and elective general surgery. We also offer community health nursing, an active diabetes program, optometry, laboratory, dental, and ENT services along with behavioral and social services and women's health. We are seeking candidates who are committed to improving the health of the local community and being part of a team approach to medicine. The hospital is located 13 miles from Glacier National Park. This area offers spectacular mountains and incredible outdoor activities year round. There are loan repayment options, excellent benefits, and we are a designated NHSC site. If you are interested in joining our medical team, contact Dr. Peter Reuman at peter.reuman@ihs.gov or telephone (406) 338-6150; or contact the Physician Recruiter, Audrey Jones, at audrey.jones@ihs.gov or telephone (406) 247-7126. We look forward to hearing from interested candidates.

Family Practice Physician Pharmacists PHS Indian Hospital, Harlem, Montana

The Fort Belknap Service Unit is seeking family practice physician and pharmacist candidates to join their dedicated staff. The service unit is home to a critical access hospital (CAH) with six inpatient beds, two observation beds, and a 24-hour emergency room, as well as an 8 am to 5 pm outpatient clinic. The service unit also operates another outpatient clinic 35 miles south of Fort Belknap Agency in Hays. The Fort Belknap CAH outpatient visits average 39,000 per year. The new clinic in Hays, the Eagle Child Health Center, can adequately serve 13,000 per year. The medical staff includes four family practice positions, two physician assistants, and one nurse practitioner, and has implemented the Electronic Health Record in the outpatient clinic. The service unit also has a full-time staffed emergency medical services program. The staff is complemented by contract *locum tenens* physicians for weekend emergency room coverage.

The medical staff is supported by and works with a staff of nurses, behavior health personnel, physical therapist, lab and x-ray personnel, pharmacists, dentists, administrators, housekeepers, supply specialists, and contract practitioners to provide the best possible care to patients. The staff works as a team to make a difference. Contract (private) hospitals are from 45 to 210 miles from the facility.

There are loan repayment options, excellent benefits, and we are a designated NHSC site. The area is primarily rural, and a friendly small-town atmosphere prevails here. The reservation communities promote various local activities such as rodeos, church socials, and basketball. The tribe also manages its own buffalo herd. Bigger events fill in the calendar as well, such as the Milk River Indian Days, Hays Powwow, and the Chief Joseph Memorial Days, featuring cultural activities and traditional dancing. The Fort Belknap Tribe has hunting and fishing available both on and off the reservation. The Little Rocky Mountains and the Missouri River provides scenic and enjoyable areas for the outdoor-minded. If you are interested in joining our medical team, contact Dr. Robert Andrews at robert.andrews@ihs.gov or telephone (406) 353-3195; or contact the Physician Recruiter, Audrey Jones, at audrev.jones@ihs.gov; telephone (406) 247-7126.

Family Nurse Practitioner or Physician Assistant Fort Peck Service Unit; Poplar, Montana

We are announcing a job opportunity for a family nurse practitioner and/or physician assistant at the Verne E Gibbs Health Center in Poplar, Montana and the Chief Redstone Health Clinic, Indian Health Service, Fort Peck Service Unit in Wolf Point, Montana. The Fort Peck Service Unit is located in the northeast corner of Montana along the Missouri river. Fort Peck Service Unit has two primary care clinics, one in the town of Poplar and one in the town of Wolf Point. The Medical Staff is composed of five family practice physicians, two internal medicine physicians, one pediatrician, one podiatrist, and four family nurse practitioners/physician assistants. We have a full complement of support services, which include dental, optometry, audiology, psychology, social work, radiology, lab, public health nursing, and a very active Diabetes Department that includes one nurse educator, one FNP, and one nutritionist. We strive to provide quality care through a strong multidisciplinary team approach; we believe in being involved in the community to encourage a "Healthier Community."

There are many opportunities for recreation, as we are a short distance from the Fort Peck Dam and Reservoir. For more information about our area and community please go to the website at <http://www.ihs.gov/FacilitiesServices/AreaOffices/Billings/FtPeck/index.asp>. We are looking for an applicant with well rounded clinical skills. Two years experience is preferred but new graduates are welcome to apply. Northeast Montana offers many amenities one might not expect this far off the beaten path. If you are interested please contact our provider recruiter, CDR Karen Kajiwarra-Nelson, MS, CCC-A at (406) 768-3491 or by e-mail at karen.kajiwarra@ihs.gov.

Family Practice Physicians Crownpoint, New Mexico

The Crownpoint IHS facility has openings for three family practitioners with low risk obstetric skills (we will consider FP candidates without OB skills.) Our service unit follows a Family Medicine model for providing full-spectrum care to our patients, with a dynamic medical staff that finds the work here quite rewarding. With a high HPSA rating, we are a NHSC-eligible site for payback and loan repayment.

Crownpoint is a town of about 2,500 people in the Four Corners region of New Mexico. We serve a traditional community of 25,000 Navajo people, many of whom speak only Navajo and live in traditional homes with no running water, electricity, or phone service. Our hospital has a six bed ER, a 17 bed med/peds unit, a labor and delivery/post-partum unit, and a large outpatient clinic. We have dental, optometry, and mental health services, as well as on-site pharmacy, laboratory, radiology, and ultrasonography. Our medical staff is a collegial and supportive group including ten family physicians, two pediatricians, an obstetrician/gynecologist, a psychiatrist, four PAs, three NPs, and a podiatrist. We have a very exciting, full-spectrum medical practice that includes high-risk prenatal care, low-risk labor and delivery, emergency room care with management of trauma and orthopedics, and an interesting inpatient medicine and pediatric service.

As primary care physicians in a rural setting, we manage a wide variety of medical problems. We care for many patients with diabetes and hypertension, but we also see some unusual illnesses such as plague, Hantavirus, and snake bites. There are many opportunities for outpatient and ER procedures including suturing, therapeutic injections, closed reductions of fractures and dislocations, para/thoracentesis, chest tubes, LPs, colposcopy, sigmoidoscopy, and OB ultrasound.

While Crownpoint is small, there is a lot to do in the surrounding area. There are two junior colleges in town where many of us have taken Navajo language, weaving, and history classes. Some have gotten involved with local churches and children's activities. Outdoor activities are plentiful, with downhill and cross-country skiing, camping, and fishing all nearby. There are several excellent mountain biking and hiking trails, as well as Anasazi ruins that are right in Crownpoint. Albuquerque is two hours away and is our nearest large city with an international airport. Other destinations that are within an afternoon's drive include Santa Fe (three hours), Durango and the Rocky Mountains (two hours), Taos (four hours), Southern Utah's Moab and Arches/Canyon lands National Parks (four hours), Flagstaff (three hours) and the Grand Canyon (five hours).

For more information, contact Harry Goldenberg, MD, Clinical director, at (505)786-5291, ext.46354; e-mail harry.goldenberg@ihs.gov; or Lex Vujan at (505) 786-6241; e-mail Alexander.vujan@ihs.gov.

Family Practice Physician Pediatrician Bristol Bay Area Health Corporation, Dillingham, Alaska

Bristol Bay Area Health Corporation (BBAHC) is a mature tribal compact located in scenic southwestern Alaska. The Bristol Bay Area Service Unit encompasses 44,000 square miles of Alaska country bordering the Bristol Bay region of the state. Over 400 employees provide primary care to 28 villages including two sub-regional villages, and a primary care hospital, Kanakanak, located in Dillingham, Alaska. The Medical Staff consists of nine family physicians, a pediatrician, a nurse midwife, four dentists, a physical therapist and an optometrist, all providing primary care. The patient population consists of Yupik Eskimo, Aleut, and Athabascans who have been residents of the area for hundreds of years. Family physicians provide a broad spectrum of practice including obstetrics, inpatient medicine, emergency care and procedures such as colonoscopy, EGD, flexible sigmoidoscopy, colposcopy, and treadmill services in a very collegial and supportive atmosphere. Our solo pediatrician is allowed to practice full spectrum pediatrics with an extremely interesting patient mix and some very high risk and rare genetic disorders unique to this area. The pediatrician works in a collegial manner with family physicians and is not required to perform any adult medicine or obstetrics, but solely pediatrics.

BBAHC was the first hospital in the country to establish a 638 contract and has an extremely good working relationship with their Board of Directors. Of note, the practice here in Alaska is unique, and air travel to outlying villages is required, since continuity care to the villages is very important to our care here and is uniquely rewarding. BBAHC has an extremely competitive salary and benefits package.

If interested, please contact Arnie Loera, MD, Corporate Medical Director, at (907) 842-9218, Kanakanak Hospital/Bristol Bay Area Health Corporation, PO Box 130, Dillingham, Alaska 99576. You may also contact him by e-mail at aloera@bbahc.org. CVs can be faxed to (907) 842-9250, attn: Arnie Loera, MD. You may also view our website for information about our corporation at www.bbahc.org.

**Family Practice Physician
Santa Clara Indian Health Service Health Center;
Espanola, New Mexico**

The Santa Clara Indian Health Service Health Center is recruiting for a family practice physician for a full-time position. The medical department is staffed with three providers: one full-time family practice physician, one half-time family practice physician, one half-time internal medicine physician, and one full-time nurse practitioner or one full-time physician assistant position. This ambulatory care clinic is primary care-oriented with outpatient, dental, behavioral health, laboratory, radiology, optometry, psychiatry, podiatry, pediatrics, women's health, and other services. The referral facility is Santa Fe Indian Hospital in Santa Fe, New Mexico, located 30 miles away, from where many of the staff commute.

The Santa Clara Health Center is located in the Pueblo of Santa Clara in Northern New Mexico. This area is renown for its famous black pottery and Puye cliff dwellings and has outdoor activities including their very own Big Rock Casino and

Golf Course, skiing nearby at Santa Fe, Taos, or Angelfire, fishing, river rafting, biking, hiking, rock climbing, feasts, powwows, and many others. We are located approximately 80 miles northwest from Albuquerque, the largest city in New Mexico. The University of New Mexico is also located in Albuquerque.

The position is available as either Commissioned Corps or Civil Service (US citizens and Status Candidates). For more information, please contact Bindu Smelser, MD or Chico Livingston MD at Santa Clara Health Center, (505) 753-9421, or apply on the open continuous announcement number AAO-OC-602 to Albuquerque Area Indian Health Service, Division of Human Resources, 5300 Homestead Road, NE, Albuquerque, NM 87110; telephone (505) 248-4510. Contact Raelyn Pecos at (505) 248-4106 or raelyn.pecos@ihs.gov for a copy of the job announcement, or go to www.usajobs.gov, USAJOBS control number 806649.

**Medical Technologist
Tuba City Regional Health Care Corporation; Tuba City,
Arizona**

The Tuba City Regional Health Care Corporation, a 73-bed hospital with outpatient clinics serving 70,000 residents of northern Arizona, is recruiting for full-time generalist medical technologists. The laboratory has state-of-the-art equipment. We offer competitive salary, based on experience. Relocation benefits are available. New graduates are encouraged to apply for this position. Tuba City is located on the western part of the Navajo reservation approximately 75 miles north of Flagstaff, Arizona, with opportunities for outdoor recreation and cultural experiences with interesting and adventurous people.

For more information, please contact Minnie Tsingine, Laboratory Supervisor, at (928) 283-2716 or minnie.tsingine@tcimc.ihs.gov. For an application, please contact Human Resources at (928) 283-2041/2432 or mfrancis@tcimc.ihs.gov.

**Dentist
Family Nurse Practitioner or Physician Assistant
Northeastern Tribal Health Center; Miami, Oklahoma**

The Northeastern Tribal Health Center is seeking a full-time family practice dentist and a family practice Nurse practitioner or physician assistant for an ambulatory health care center with close proximity to the Grand Lake area, as well as thirty minute interstate access to Joplin, Missouri. The facility offers competitive salaries, excellent benefits, loan repayment options, no weekends, and no call. To apply, please submit a current resume, certifications, and State of Oklahoma license. Applicants claiming Indian preference must submit proof with their resume. Applicants will be required to pass a pre-employment drug screen and complete a background check. Indian preference applies, but is not absolute. To apply, send requested documents to Northeastern Tribal Health Center, P.O. Box 1498, Miami, Oklahoma 74355, to the attention of Personnel. The phone number is (918) 542-1655.

**Family Physician
Winslow Indian Health Care Center; Winslow, Arizona**

The Winslow Indian Health Care Center (WIHCC) in northern Arizona is currently looking for a family practice physician who is interested in a broad scope of practice, preferably including obstetrics. We have a staff of 12 physicians, including a surgeon, and eight family nurse practitioners. We offer comprehensive ambulatory and urgent/emergent care to patients at our health center in Winslow, where we are currently completing construction on a state-of-the-art, seven bed Urgent Care Center. WIHCC also operates two field clinics five days a week on the Navajo Reservation, at Leupp and Dilkon. Our physicians provide inpatient care at the local community hospital, the Little Colorado Medical Center, where obstetrical back-up is readily available. Winslow offers an awesome mix of professional, cultural, and recreational opportunities. We are located just seven miles from the breathtaking beauty of Navajoland and its people, and 50 miles from Flagstaff — a university town with extensive downhill and cross-country skiing, where several of our staff choose to live.

WIHCC became an ISDA 638 contracted site in 2002, and has experienced steady growth and enhancement of programs and opportunities since the transition from a direct IHS program. Please contact Frank Armao, MD, Clinical Director, if you are interested in pursuing an opportunity here. E-mail frank.armao@wihcc or telephone (928) 289- 6233.

Family Physician Juneau, Alaska

We are looking for a family practice physician to join our group of eight family practice physicians. This is a full time position, and includes obstetrics and call, 1:8. Outpatient work is primarily continuity care for your panel of patients, with some time in the walk-in clinic as well. Inpatient work is at the local (non-IHS) community hospital. We offer a competitive salary and excellent benefits.

Juneau is located in beautiful southeast Alaska; it has a population 30,000, with a temperate climate, and incredible outdoor recreation opportunities. For more information, contact Janice Sheufelt, MD, medical director, at (907) 463-4057; e-mail janices@searhc.org; or see our website at www.searhc.org.

Family Medicine Physicians Phoenix Indian Medical Center, Phoenix Arizona

The Family Medicine Department is recruiting for BC/BE family physicians at the Phoenix Indian Medical Center and the satellite clinic at Salt River. The positions are predominantly outpatient with limited hospital inpatient activity; OB optional. Join eight physicians, one nurse practitioner, one physician's assistant, and a number of part-time providers. PIMC is one of the largest IHS sites, with over 100 providers and 70 active beds. We have been using PCC+ and in part EMR. There are great opportunities socially, culturally, professionally, and educationally living in the Phoenix metropolitan area. The IHS has a great benefits package for Civil Service and Commissioned Corps. Loan payback is an option. For more information, please contact/send CV to Eric Ossowski MD,

Family Medicine Department, Phoenix Indian Medical Center, 4212 N. 16th Street, Phoenix Indian Medical Center, Phoenix, Arizona 85016. Telephone (602) 263-1537; fax (602) 263-1593; or e-mail eric.ossowski@ihs.gov.

Family Practice Physician Gallup Indian Medical Center; Gallup, New Mexico

The Gallup Indian Medical Center has an immediate opening for a family medicine physician. GIMC is one of the largest Indian Health Service sites. The IHS has great benefits packages for both Civil Service and Commissioned Corps providers. We are an NHSC scholarship and an IHS Loan Repayment site as well. The Department of Family Medicine offers the opportunity for full spectrum family medicine care. There are currently nine physicians, two physician assistants, and one pharmacist clinician in the department. Chronic disease management and prevention are the focus for continued development and expansion of this department and program. The hospital has a multi-specialty group, and family medicine physicians have inpatient privileges at GIMC as well as at the community hospital, Rehoboth McKinley Christian Hospital.

Please contact Dr. Alma Alford, Chief of Family Medicine, if you are interested in pursuing an opportunity here. The address is Gallup Indian Medical Center, 516 E. Nizhoni Blvd., P.O. Box 1337, Gallup, New Mexico 87301-1337; telephone (505) 722-1000; fax (505) 726-8740; office number (505) 722-1280 or 722-1775; e-mail alma.alford@ihs.gov.

Physician Nurse Practitioner Redbird Smith Health Center; Sallisaw, Oklahoma

The Redbird Smith Health Center has immediate openings for a full-time family medicine or internal medicine physician and a nurse practitioner. This facility, located in Sallisaw, is one of six rural ambulatory clinics operated by the Cherokee Nation. Other services offered at this facility include dental, radiology, public health nursing, in-depth diabetes program, pharmacy, and laboratory. Cherokee Nation offers competitive salaries, excellent benefits, loan repayment options, no weekends, no call, and relocation expenses are available.

If interested in any of these exciting opportunities, please submit a completed Cherokee Nation application along with copies of degrees and/or certificates to Cherokee Nation Health Administration Office, Attn: Kathy Kilpatrick or Angie Cone, PO Box 948, Tahlequah, Oklahoma 74465; telephone (918) 453-5000; fax (918) 458-6174; or e-mail kathy-kilpatrick@cherokee.org or angie-cone@cherokee.org. We would also like to extend an invitation to come and visit our clinic – we feel confident you'll love our charming southern hospitality!

For more detailed information regarding job listings or for an application, log onto our website at www.cherokee.org. Applicants with Indian preference must submit a copy of their Certificate Degree of Indian Blood (CDIB) along with their application. All applicants will be required to pass a pre-employment drug screen and complete a background check.

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