THE IHS PRIMARY CARE PROVIDER

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

August 2010 **Volume 35 Number 8**

Rural Native American Perception of HIV/AIDS

Gregory S. Felzien, MD, Division Director of Infectious Disease, Cherokee Nation W. W. Hastings Hospital, Tahlequah, Oklahoma, and Annalee Miller, MD, CAPT USPHS, Division Director of Internal Medicine, Cherokee Nation W. W. Hastings Hospital

Abstract

Despite the increasing availability of educational material and progress in the diagnosis and treatment of HIV/AIDS, there continues to be a disproportionate rate of HIV/AIDS cases in American Indians and Alaska Natives (AI/AN) and a perception of decreased risk of the disease within this population. The misinformation found in the community leads to individuals considering themselves at low risk and not vulnerable to becoming infected. This may result in more risky behavior, such as unprotected penetrative sex and needle sharing. Informed awareness of risky behavior is essential in making positive decisions concerning preventative measures. Concerns about this misinformation, and lack of access to care within the AI/AN population led to the development of a questionnaire that would address the perceptions of HIV/AIDS in this population and develop educational platforms that could lead to preventative measures. A literature search was performed with the use of Med Search for the period 1961 - 2006 using key words HIV, AIDS, perception and Native American. The primary investigator was unable to find any literature concerning the perception of HIV/AIDS within the rural AI/AN population. This observational study represents the first documented look at this issue.

Background

Perception of risk for HIV/AIDS is pivotal in determining one's behavior, which could result in the acquisition of this disease process. Individuals in rural communities and those in heterosexual relationships might have the perception of being at low risk of acquiring HIV/AIDS. Having increased knowledge and awareness of the risks for acquiring HIV/AIDS can change personal behavior and motivate individuals to select self-protective or less risky actions. Therefore, better understanding about which factors predict an individual's perception of risk is essential in developing effective HIV/AIDS prevention programs.[1] This article presents findings from the Rural Native American Perception of HIV/AIDS study, which was designed to identify the perception of HIV/AIDS within this community and develop potentially effective strategies to develop outreach programs, reduce risky behaviors, and reduce HIV transmission in this population.

The AI/AN population is comprised of 562 federally recognized tribes plus at least 50 state-recognized tribes.[2] The 2004 Census estimated the number of AI/AN to be about 4 million, or 1.4 percent of the US population. The number of individuals who reported American Indian or Alaska Native as their only race was about 2.2 million, or 0.8 percent of the population. About another 1.9 million reported their race as American Indian or Alaska Native and one or more other races, including about 1.4 million people who reported their race as American Indian or Alaska Native and White. The American Indian or Alaska Native-alone-or-in combination population included about 561,000 Hispanics, and the American Indian or Alaska Native alone population included about 299,000 Hispanics.[3] Because each tribe and intertribal system has its own culture, beliefs, languages, and practices, it can be challenging to create effective HIV/AIDS prevention programs that are tailored to this diverse group. Therefore, prevention programs that can be adapted to individual tribal cultures and beliefs are critically important.

HIV/AIDS among AI/AN

Current data regarding HIV/AIDS among AI/AN have limitations due to incomplete surveillance data and racial

In this Issue...

194 Rural Native American Perception of HIV/AIDS
205 IHS Child Health Notes
211 Meetings of Interest
212 Position Vacancies

misclassification and underreporting. Not all states with large AI/AN populations have been conducting HIV surveillance. For example, California began HIV surveillance only during the past few years and thus was not included in the initial data. Although the numbers of cases for AI/AN are relatively low, these numbers may be affected by racial misclassification. Studies in multiple Areas have shown that the degree of misclassification differs geographically. In Alaska, 3 to 3.7% of AI/AN with HIV/AIDS were misclassified as being of another race, while in Los Angeles, 54.4% to 56% were racially misclassified.[4,5] Other regional misclassification rates included Arizona (17.6%), Washington (33.6%), Oklahoma (33.6%) and California (55%).[6]

These numbers may also be affected by other factors such as decreased access to health care and concerns of confidentiality. At the time of AIDS diagnosis, more AI/AN, compared with persons of other ethnicities, resided in rural areas, which may result in decreased HIV testing due to limited access to health care. Also, AI/AN may be less likely to seek testing because of concerns about confidentiality in close-knit communities, where someone who seeks testing is more likely to encounter friends, relatives, or acquaintances at the local health care facility. Of AI/AN who responded to the Behavioral Risk Factor Surveillance System survey between 1997 and 2000, 50.5% reported that they had never been tested for HIV. This percentage was higher in the southwestern US, where 58.1% of the AI/AN reported never having been tested.[7,8] Therefore, current information demonstrates a low estimate of HIV/AIDS in AI/AN. Reported HIV/AIDS cases among this population represent less than 1% of the total number of cases reported to the CDC's HIV/AIDS Reporting System. Yet, HIV/AIDS is a growing problem among AI/AN and, when population size is taken into account, this population in 2006 ranked third in rates of diagnosis, after blacks (including African Americans) and Hispanics.[9] AI/AN make up 1.4% (4 million people) of the total US population,[3] and the rate of AIDS diagnosis for this group has been higher than that for Caucasians since 1995.

In 2006, based on 33 states with long-term, confidential, name-based HIV reporting, HIV/AIDS was diagnosed in an estimated 166 AI/AN (adults, adolescents, and children), representing 0.5% of the total number of HIV/AIDS diagnoses reported for that year. From 2003 through 2006, the estimated number of newly diagnosed HIV/AIDS cases increased among whites and Asians/Pacific Islanders, remained stable among blacks and Hispanics, and fluctuated among AI/AN. Blacks accounted for 49% of all HIV/AIDS cases diagnosed in 2006. In 2006, rates of HIV/AIDS cases were 67.7 per 100,000 in the black population, 25.5 per 100,000 in the Hispanic population, 8.8 per 100,000 in the AI/AN population, 8.2 per 100,000 in the white population, and 6.7 per 100,000 in the Asian/Pacific Islander population.[9]

From 2002 through 2006, the estimated number of AIDS cases decreased among blacks and AI/AN, remained stable among whites and Hispanics, and increased among Asians/Pacific Islanders. In 2006, rates of AIDS cases were 47.6 per 100,000 in the black population, 15.6 per 100,000 in the Hispanic population, 6.2 per 100,000 in the AI/AN population, 5.4 per 100,000 in the white population, and 3.7 per 100,000 in the Asian/Pacific Islander population. The estimated number of deaths of persons with AIDS decreased among whites, blacks, and AI/AN. The estimated number of deaths of persons with AIDS remained stable among Hispanics and increased among Asians/Pacific Islanders.[9]

Risk Factors and Barriers to Prevention

Race and ethnicity are not, by themselves, risk factors for HIV infection. However, there are challenges within the AI/AN populations that are associated with the risk for HIV infection. These include sexually transmitted diseases, substance use, cultural diversity, and low socioeconomic status.

The presence of a sexually transmitted disease can increase the chance of contracting or spreading HIV.[10] The high rates of *Chlamydia trachomatis* infection, gonorrhea, and syphilis among AI/AN present increased risk factors for the spread of HIV among this population. In 2005, surveillance data by ethnicity demonstrated that the second highest rates of gonorrhea and *Chlamydia trachomatis* infection and the third highest rate of syphilis were among AI/AN. In 2006, the Chlamydia rate among AI/AN was 797.3 cases per 100,000 population, over five times higher than the rate among whites (153.1 per 100,000 population). The gonorrhea rate among AI/AN in 2006 was 138.3 which was four times higher than the rate among whites (36.5 per 100,000 population). As for primary and secondary syphilis, the rate among AI/AN increased 37.5% (from 2.4 to 3.3), and 0.8% of all cases reported to the CDC were among AI/AN. Compared to whites, the 2006 rate for AI/AN was 1.7 times higher.[11,12]

The spread of HIV is also increased with more risky behavior such as unprotected sex. This risk factor has also been found to be increased when individuals are under the influence of drugs or alcohol. The 2007 National Survey on Drug Use and Health indicated current illicit drug use varied by race/ethnicity among persons age 12 or older, with the highest rate among AI/AN (12.6 percent). This is compared to rates of 11.8 percent for persons reporting two or more races, 9.5 percent for blacks, 8.2 percent for whites, 6.6 percent for Hispanics and 4.2 percent for Asians. As for the use of alcohol, whites in 2007 were more likely than other racial/ethnic groups to report current use of alcohol (56.1 percent) in those age 12 or older. The rates were 47.5 percent for persons reporting two or more races, 44.7 percent for AI/AN, 42.1 percent for Hispanics, 39.3 percent for blacks, and 35.2 percent for Asians.[13,14]

Poverty related issues such as lower levels of education and decreased access to health care may also have an added effect on the risk for HIV infection.[15] For AI/AN, from 2002

through 2004, approximately 24.3%, as compared to the national average of 12.4%, were living in poverty.[16] In 1990, 66 percent of the 1,080,000 American Indians 25 years old and over were high school graduates or higher, compared with only 56 percent in 1980. Despite these advances, the 1990 proportion was still below that for the total US population (75 %). American Indians were also less likely than the entire US population to have completed a bachelor's degree or higher. About 9 percent of American Indians completed a bachelor's degree or higher in 1990, compared with 8 percent in 1980 -- still lower than the 20 percent for the total population in 1990.[17] AI/AN also have a shorter life span compared to other ethnicities, decreased access to care, and higher rates of many other diseases such as diabetes, tuberculosis, and alcoholism.[18,19]

Method/Participants

This study was designed in order to examine the perception of HIV/AIDS within the rural AI/AN population and to use this information as a starting point in the development of educational programs within the community. The study was a cross-sectional study, and the goal was to include 200 IA/AN participants 18 years of age or older. The participants were recruited by a nurse or LPN during the check-in process at a patient's regularly scheduled appointment at an Indian Hospital in Oklahoma. The participants were therefore patients of the Adult Medicine Clinic and the family and friends of these individuals. The nurse or LPN administered the 47 question survey in a secluded room within the clinic and was available to answer any questions or assist as needed with the survey process. The survey intentionally consisted of a mixture of yes and no questions as well as open-ended questions that would require a narrative answer by the participant. While participants were asked to be honest as they completed the survey, they could elect to answer all, some, or none of the questions on the survey.

Each initial participant was invited to attend an educational dinner lecture concerning HIV/AIDS. Those who filled out a survey in the clinic and then attended the educational lecture were then given a second survey in the lecture room, with the intent being to compare the responses before and after the lecture to measure any change in perception of HIV/AIDS. Surveys were collected from November 20, 2006 through February 16, 2007 with a lecture scheduled for February 16, 2007. Due to a poor initial response, surveys were again collected from February 28, 2007 through July 27, 2007 with a lecture delivered on July 27, 2007.

Results

A total of 129 participants filled out the pre-lecture surveys. The initial group consisted of 90 responders and the second group consisted of 39 responders. Unfortunately only 11 responders attended the first HIV/AIDS lecture and 1 responder attended the second lecture. Therefore only the data from the initial surveys are presented here. Many questions allowed for more extensive narrative responses and some participants chose to not answer all questions.

As seen in Table 1, most participants were older than 36 (65%) and married (55%). The majority of the participants (85%) were Plains Indians, but 15% of the participants did come from six other AI/AN tribes. No participants indicated that they were practicing homosexuals and only one participant indicated bisexual behavior. Of the 14% of participants who noted a history of sexually transmitted diseases, 15 of 19 (78.9%) had a general idea of the definition of a sexually transmitted disease. A surprising number of participants (77%) reported not using condoms, and only one participant reported always using condoms. Marijuana was the most commonly reported drug used by this population (11%) but overall drug use levels were low, with only 15% of this study population reporting any drug use. Only one participant answered yes to having HIV/AIDS and only one participant answered yes to taking medications for HIV/AIDS. Twenty participants personally knew another person whom they believed had HIV/AIDS.

Participants were asked to report the number of sexual partners during several distinct time frames: ages 18 - 25, 26 - 35, 36 - 45, 46 - 55, and over 55, as shown in Table 2. Again, many participants chose to not answer all questions in the survey. Participants seemed to find it easier to tally their sex partners over a lifetime in contrast to over a defined period of time. A total of 102 participants reported their lifetime sex partner numbers. This information demonstrates that the majority of participants had 1 to 2 sexual partners during any given time frame, i.e., last 6 months, last 12 months, last 5 years and over one's life time, and only a small number of participants recorded more than 5 partners over their lifetime. Those respondents with more than 5 sexual partners over their lifetime included 11 in the 46 to 55 age group and 12 over the age of 55.

Many open ended questions were used in this study in order to minimize any misleading information and to attempt to obtain the true perception of HIV/AIDS within this population. As can be seen in Table 3, only 24 participants knew HIV/AIDS represented the terms Human Immune Deficiency Syndrome and Acquired Immune Deficiency Syndrome. Further questioning demonstrated that 45 of 108 (41.7%) study participants knew the difference between HIV and AIDS, where the 24 who provided a narrative answer to these open ended questions stated that HIV was the virus and AIDS was the disease. The remaining participants did not further describe these differences. Although 45 participants reported they knew the difference between HIV and AIDS, 20 participants gave narratives on the particular signs and symptoms associated with these disease processes. The most common comments included infections, weight loss, feeling tired, and sores. Two individuals stated that one cannot tell if

an individual has HIV or AIDS. Participants gave more details concerning the risk factors associated with HIV/AIDS, and most often described having sex in general, blood exposures, using drugs, and body fluid exposure. Yet, only a small number noted homosexuality, mother to child transmission, anal sex, prostitution, or tattoos as risk factors. The majority of the participants did understand that HIV/AIDS was preventable with condom use, abstinence, and the avoidance of needle sharing. They also demonstrated an understanding that HIV/AIDS could be obtained after having sex only once. Upon questioning participants about risk groups, the participants responded that both genders were at risk, and most felt that African Americans and city dwellers were at high risk for HIV/AIDS.

More detailed questions were used to explore what study participants felt they knew about HIV/AIDS, as seen in Table 4. Sixteen of 90 (17.8%) participants felt that a mother with HIV/AIDS could safely breastfeed their newborn, but all the participants reported that an individual with HIV/AIDS would not be able to donate blood. One-hundred-one out of 116 (87.1%) participants knew that there was treatment for HIV/AIDS and 84 of 101 (83.2%) were aware that HIV/AIDS could still be transmitted despite being on therapy. A small number of individuals reported that there was a cure for HIV/AIDS (5 of 120; 4.2%), and that a vaccine existed for this disease process (25 of 106; 23.6%). The majority of participants did not know the life expectancy of an individual with HIV/AIDS, but the majority of individuals speculated that those with HIV/AIDS were expected to live 2 to 10 years.

Insight into the very personal reactions that this study group felt concerning HIV/AIDS and how this infection may affect them and others is demonstrated in Table 5. When asked about reactions to knowing someone with HIV/AIDS, discovering they, themselves had HIV/AIDS, or a child was diagnosed with HIV/AIDS, the study participants in general had positive responses. This included seeking care, taking measures to protect themselves and others from this disease process, and praying, yet many responded that they would not know what to do despite there being an HIV/AIDS clinic at the facility where they received care. Still, a proportion of individuals reported very negative responses, with five stating they would avoid an individual with HIV/AIDS, four said they would commit suicide, and 11 reported that if they were pregnant and were told they had HIV/AIDS, they would proceed with an abortion.

Discussion

This study was designed to survey the knowledge and awareness of HIV/AIDS within the rural AI/AN population in Oklahoma. Prior to this study there had been minimal documentation to understand how this population may feel about the HIV/AIDS and what knowledge may exist in this specific community. Although limitations existed, this study gives insight into the perception of HIV/AIDS in a rural AI/AN population.

Risks of concomitant sexually transmitted diseases, lack of circumcision, oral sex, and trends in increased HIV/AIDS transmission rates in high risk heterosexual contacts were not noted as risk factors in this study population. Also, an increased number of sexual partners was not noted as a risk factor, although this is the case in certain high risk populations. The researchers found that individuals over the age of 55 tended to have more lifelong sexual partners. Risk factors that were noted by the participants included living in the city, African American heritage, having sex with men or women, breast feeding, injection drug use, mother to child transmission, anal sex, homosexual contact, prostitution, and blood and body fluid exposure. One individual noted tattoos as a risk factor.

Attitudes concerning the subject of HIV/AIDS appeared to play a significant role on the perception of this disease process. The sense that there is a terrible stigma attached to this disease was apparent in the narrative answers given by the participants. When asked how they would feel if they or a friend had HIV/AIDS, many participants gave answers that in one breath were both supportive, e.g., seek treatment, and yet punitive, e.g., be angry. Some of the emotions related in the narratives were even violent, suggesting abortion and suicide as an appropriate reaction.

The participants did note that the main preventions for HIV/AIDS included the use of condoms, avoidance of needles, and abstinence. In contrast, almost none of the study population used condoms routinely, despite many reporting multiple sex partners. Several participants stated that breast feeding was not a risk factor, that individuals could not acquire HIV/AIDS from someone on HIV/AIDS therapy, and the majority felt that the life expectancy was 20 years or less. A small number of participants did not think there was treatment available for HIV/AIDS, and that there was an available vaccine and cure for this disease process. Participants did note that individuals with HIV/AIDS could not donate blood due to the underlying disease process.

These issues bring to light options for education and highlight the need for better outreach programs concerning current knowledge of HIV/AIDS. Reaching out to educate this study population would need to done in a way that allowed anonymity. Clearly this population was very reluctant to be identified in any public way with HIV/AIDS. Our offered lecture was therefore very ineffective. Perhaps radio or television programs, public school curricula, or health fairs that included HIV/AIDS education would reach a greater number of individuals and would be a better way of improving knowledge. Also, better information about facility clinics, such as the active HIV/AIDS clinic, needs to be offered. Further education is required in order to educate rural populations about the risk factors in hopes of eliminating myths about HIV/AIDS, decreasing risky behavior, and minimizing transmission.

The authors conclude that this study suggests the need for better education in the rural community, based on a better understanding of the community's perceptions, so that strides can be made to improve the knowledge base of the community.

Limitations

Due to the physical location of the study, most participants reported being Plains Indians, although many participants did report being members of other AI/AN tribes. As participants were recruited from patients and family attending the Adult Medicine Clinic, half of our participants were over the age of 45.

The survey was intentionally designed to allow participants to give narrative answers. The intention was to avoid leading questions or suggesting answers, or limiting responses. Indeed this survey did elicit a broad spectrum of answers, some of which would not have been anticipated by a multiple choice approach. However, the array of responses was at times so varied that attempting to group answers was difficult and possibly misleading.

Participation in this survey was voluntary, and several individuals did not participate due to time requirements and the length of the survey. Other reasons for non-participation include refusal due to the subject matter and concern that the information they provided would have an adverse effect upon the care they received. Data collection was also limited due to omitted questions such as education level and perception of other protective factors like male circumcision.

While it was not a question included in the original survey, many participants demonstrated an interest in attending a lecture that discussed HIV/AIDS. Nearly all participants commented that they would attend such a lecture, but only 11 participants attended the first lecture and one the second. Several participants made a comment following the completion of the study that they were not comfortable attending such a lecture since it might lead to assumptions within the community that they themselves had HIV/AIDS or that this disease had infected one of their family members. The lecture was also separated by a significant amount of time from the original survey, which likely contributed to the lack of attendance. Considerations were made in contacting the participants by mail or phone, but some were concerned about receiving this information at their place of residence. Suggestions were made to have a general educational health fair that included HIV/AIDS, thus diminishing the anxiety and stigma associated with learning about this disease process.

Special Thanks

The authors specially thank Tina Etherton, LPN and Susan Adams, RN, BSN for their diligence in obtaining the surveys and making this study successful.

References

1. Ward EG. Disch WB. Levy JA. Schensul JJ. Perception of HIV/AIDS risk among urban, low-income senior-housing residents. [Journal Article] *AIDS Education & Prevention*. 2004 Dec; 16(6):571-88.
2. US Department of the Interior, Bureau of Indian Affairs. Indian entities recognized and eligible to receive services from the United States Bureau of Indian Affairs. Federal Register 2003 December 5; 68(234):68179–68184.
3. U.S. Census Bureau The American Community—American Indians and Alaska Natives: 2004
4. State of Alaska Health and Social Services, Section of Epidemiology. Accuracy of race/ethnicity data for HIV/Aids cases among Alaska Natives. *State of Alaska Epidemiology Bulletin 2003*; No. 11(May 13).
5. Hu YW, Yu Harlan M, Frye DM. Racial misclassification among American Indians/Alaska Natives who were reported with AIDS in Los Angeles County, 1981–2002. National HIV Prevention Conference; August 2003; Atlanta. Abstract W0-B0703.
6. Bertolli J, Lee LM, Sullivan PS. Racial Misidentification of American Indians/Alaska Natives in the HIV/AIDS Reporting Systems of Five States and One Urban Health Jurisdiction, U.S., 1984–2002. Public Health Reports / May–June 2007 / Volume 122.
7. Bertolli J, McNaghten AD, Campsmith M, et al. Surveillance systems monitoring HIV/AIDS and HIV risk behaviors among American Indians and Alaska Natives. *AIDS Education and Prevention* 2004; 16:218–237.
8. CDC. Surveillance for health behaviors of American Indians and Alaska Natives: findings from the Behavioral Risk Factor Surveillance System 1997–2000. *MMWR* 2003; 52(No. SS-07):1–13.
9. CDC. HIV/AIDS Surveillance Report, 2006. Atlanta: US Department of Health and Human Services, CDC; 2008.
10. Fleming DT, Wasserheit JN. From epidemiological synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection. *Sexually Transmitted Infections* 1999; 75:3–17.
11. CDC. Sexually Transmitted Disease Surveillance 2006. Atlanta: US Department of Health and Human Services, CDC; November 2007.
12. McNaghten AD, Neal JJ, Li J, Fleming PL. Epidemiologic profile of HIV and AIDS among American Indians/Alaska Natives in the USA through 2000. *Ethnicity and Health* 2005; 10:55–71.
13. Leigh B, Stall R. Substance use and risky sexual behavior for exposure to HIV: issues in methodology, interpretation, and prevention. *American Psychologist* 1993; 48:1035–1045.

14. Substance Abuse and Mental Health Services Administration, Office of Applied Studies (2008). *Results from the 2007 National Survey on Drug Use and Health: National Findings* (NSDUH Series H-34, DHHS Publication No. SMA 08-4343). Rockville, MD.
15. Diaz T, Chu SY, Buehler JW, et al. Socioeconomic differences among people with AIDS: results from a multistate surveillance project. American Journal of *Preventive Medicine* 1994; 10:217–222.
16. DeNavas-Walt, Carmen, Bernadette D. Proctor, and Robert J. Mills, U.S. Census Bureau, Current Population Reports, P60-226, *Income, Poverty, and Health Insurance Coverage in the United States*: *2003*, U.S. Government Printing Office, Washington, DC, 2004.
17. Paisano, Edna L., U.S. Census Bureau, Population Division, *The American Indian, Eskimo, and Aleut Population*. Available at *www.census.gov/population/www/pop-profile/amerind.html*.
18. Korenbrot CC, Ehlers S, Crouch JA. Disparities in hospitalizations of rural American Indians. *Medical Care* 2003; 41:626–636.
19. Zuckerman S, Haley J, Roubideaux Y, Lillie-Blanton M. Health service access, use, and insurance coverage among American Indians/Alaska Natives and whites: what role does the Indian Health Service play? *American Journal of Public Health* 2004; 94:53–59.

Footnote Page

Neither authors, Gregory S. Felzien, MD or Annalee Miller, MD CAPT USPHS, have a commercial or other association that might pose a conflict of interest. Financial support was not available for this research project and no part of the information provided has been presented at any meetings or published. Gregory S. Felzien, MD had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis. Correspondence and requests for reprints should be addressed to;

Gregory S. Felzien, MD
Diplomat: Internal Medicine and Infectious Disease
Division Director of Infectious Disease
Cherokee Nation W. W. Hastings Hospital
100 S. Bliss Ave.
Tahlequah, OK 74464
918-458-3100

Since the completion of this study, the following affiliation has changed for Gregory S. Felzien, MD. The updated information includes;

Gregory S. Felzien, MD
Diplomat: Internal Medicine and Infectious Disease
Southeast Health District
Director of the Office of Infectious Disease and HIV Medicine
Bulloch Wellness Center
3 West Altman Street
Statesboro, GA 30458-5212
Ph: 912-764-2402
Fx: 912-764-5561
gsfelzien@dhr.state.ga.us

Second Author
Annalee Miller, MD CAPT USPHS
Cherokee Nation W. W. Hastings Hospital
100 S. Bliss Ave.
Tahlequah, OK 74464
918-458-3100
moanna1@hotmail.com

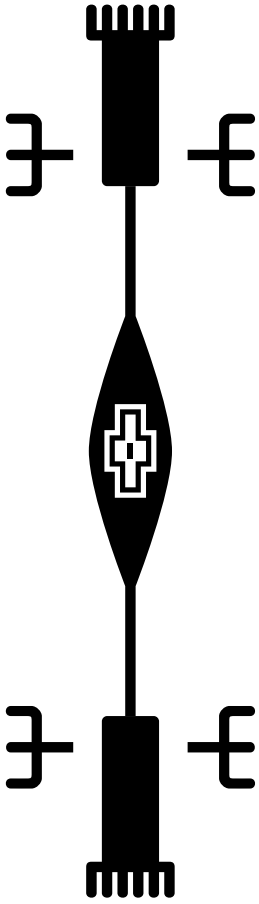


Table 1. Characteristics of Participating Population

Characteristic		Participants N = 129*	
AGE	18-25	16	
	26-35	19	
	36-45	20	
	46-55	28	
	56 and over	36	
Marital Status	Married	71	
	Single	29	
	Divorced	19	
	Widowed	7	
Native American Affiliation*	Plains Indians	110	
	Creek	6	
	Choctaw	5	
	Pawnee	1	
	Seminole	1	
	Apache	1	
	Comanche	1	
Sexual Partner Preference	Heterosexual	119	
	Bisexual	1	
Ever Had STD*	No	106	
	Yes	19	
	Which STD	Chlamydia	4
		Gonorrhea	3
		Trichamonas	3
		Genital Warts	1
Do You Use a Condom	No	100	
	Yes	19	
	How Often?	Always	1
		Half the Time	3
Do You Use Drugs	No	106	
	Yes	20	
	What Kind?	Marijuana	14
		Methamphetamines	4
		Alcohol	2
		Pills	1
Do You Have AIDS*	No	127	
	Yes	1	
Do You Know Someone with AIDS	No	107	
	Yes	20	
Are You Taking Medication for AIDS	No	118	
	Yes	1	

* Not all participants answered all questions
* STD = Sexually Transmitted Disease
*Acquired Immune Deficiency Syndrome

Table 2. Number of Sex Partners by Age and Over Time

Age		Last 6 mo	Last 12 mo	Last 5 years	Over lifetime
Ages18 -25	1-2 partners 3-5 partners >5 (max 7)	10 4 0	18 1 0	11 2 0	2 7 4
Ages 26-35	1-2 partners 3-5 partners >5	17 0 0	14 1 0	13 3 0	7 0 9
Ages 36-45	1-2 partners 3-5 partners >5 partners	11 2 1	11 3 1	11 1 2	6 3 5
Ages 46-55	1-2 partners 3-5 partners >5	21 2 0	19 0 0	21 1 2	13 7 11
Ages >55	1-2 partners 3-5 partners >5	16 0 0	13 0 0	15 2 0	5 11 12
Total Reponses		83	81	84	102

Table 3. Study Participants Self Reported Knowledge of Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS)

Knowledge Questions		Numbers of Patients N = 129*	
What is HIV or AIDS?	Human Immunodeficiency Syndrome or Acquired Immune Deficiency Syndrome	24	
Do you know the difference between HIV and AIDS?	No Yes What is the difference?	63 45 Answers that indicated HIV is a virus and AIDS is a disease 97	 24
Do you know the signs/symptoms of HIV/AIDS	No Yes What are the signs and symptoms	20 Infections Weight loss Tired Sores “can tell” Sweating Cancer Fever	 10 7 5 3 2 2 1 1
Do you know how you get HIV/AIDS?	NO Yes What are the risk factors?	15 101 Having sex Blood exposure Using drugs Body Fluid exposure Homosexual From Mother Anal sex Tattoos Prostitution	 62 36 27 25 3 1 1 1 1
How can you prevent getting HIV/AIDS?	Use condoms Abstinence Do NOT use needles	72 27 17	
Who do you think has a higher risk of getting HIV/AIDS?	People that live in the city Risk same for city and country People that live in the country	79 9 8	
Which group of people do you think have the highest risk of getting HIV/AIDS?	Black Hispanic White Native American All people	60 25 21 14 8	
Have sex with which gender carries a higher risk of getting HIV/AIDS?	Both Men Women	82 18 4	
Can you get HIV/AIDS after sex only once?	No Yes	0 115	

Table 4. General HIV/AIDS Knowledge N = 129*

Question		Numbers Answers*
Can you breastfeed your child if you have HIV or AIDS?	Yes No	16 74
Can you donate blood if you have HIV or AIDS	Yes No	0 121
Is there treatment for HIV/AIDS?	Yes No	101 16
Is there a cure for HIV/AIDS?	Yes No	5 115
Is there a vaccine for HIV/AIDS?	Yes No	25 81
Can you get HIV/AIDS if your partner is taking medications to treat HIV/AIDS?	Yes No	84 17
How long can you live with HIV/AIDS?	6 mo – 2 years 2-10 years 10 – 20 years indefinitely	4 20 6 5

Table 5: Attitudes about HIV/AIDS N = 129

Question		Numbers Answers*
What would you do if someone told you they had HIV/AIDS	Help them	28
	Be careful, protect self, avoid body fluids	19
	Nothing different	14
	Tell person to get treatment	12
	Don't know	10
	Pray for them	9
	Take them to a doctor	7
	Avoid them	5
	Comfort them	4
	I would be surprised	3
	Uncomfortable	1
	Scared	1
What would you do if you found out you had HIV/AIDS?	Get treatment	59
	Don't know	13
	Scared	7
	Angry	6
	Suicide	4
	Feel Sad	4
	Be careful to not spread disease	3
	Cry	3
	Nothing	2
	Be with family	2
	Pray	2
	It would be God's will	1
If you were pregnant and found out you had HIV/AIDS what would you do?	Don't Know	23
	See doctor	18
	Have an abortion	11
	Get Help	11
	Carry and Deliver Baby	6
What would you do if your child had HIV/AIDS	Get treatment for the child	52
	Love the child	17
	Don't know	13
	Anything I could to help the child	9
	Cry	3
	Pray	2
	Get counseling	1
	Take precautions	1

This is a page for sharing "what works" as seen in the published literature, as well as what is being done at sites that care for American Indian/Alaskan Native children. If you have any suggestions, comments, or questions, please contact Steve Holve, MD, Chief Clinical Consultant in Pediatrics at sholve@tcimc.ihs.gov.

IHS Child Health Notes

Quote of the month

"Football combines two of the worst features of American life. It is violence punctuated by committee meetings. "

George Will

Articles of Interest

Symptoms or symptom-based scores cannot predict acute otitis media at otitis prone age. *Pediatrics*. 2010:125;e1154-1161. *http://pediatrics.aappublications.org/cgi/content/abstract/peds.2009-2689v1*

Acute symptoms are used to diagnose and manage acute otitis media (AOM). The authors studied whether AOM could be predicted in children 6 months to 36 months of age based on parental suspicion of AOM or by the occurrence, duration, and/or severity of symptoms.

The most common reason for parental suspicion of AOM, restless sleep, was not predictive for AOM (RR: 1.0 [95% CI: 0.8–1.2]), nor was ear-rubbing (relative risk [RR]: 0.7 [95% confidence interval (CI): 0.5–1.0]). Neither the occurrence of fever (RR: 1.2 [95% CI: 1.0–1.4]) nor the highest mean temperature within 24 hours predicted AOM, nor did the occurrences of ear-related, nonspecific, respiratory, or gastrointestinal symptoms. The duration and severity of symptoms were not predictive for AOM, although rhinitis lasted longer and conjunctivitis was more severe in children with AOM. The AOM severity-of-symptom scale, based solely on symptoms, was equal in children with and without AOM (6.0 vs 6.0; P = .917).

The authors conclude that AOM cannot be predicted by the occurrence, duration, or severity of symptoms in young children. Symptom-based scores cannot differentiate between respiratory tract infections with or without AOM. Thus, tympanic-membrane examination is crucial in the diagnosis and severity classification of AOM in clinical practice and research settings.

Editorial Comment

For our youngest, preverbal patients, the diagnosis of AOM is always problematic. Every day in clinic we have parents tell us, "I'm sure he has an ear infection. He was up all night and he was pulling on his ears." This study confirms what many suspect: that the symptoms of an upper respiratory infection and an ear infection are indistinguishable. Most surprising is that tugging, pulling or rubbing an ear was not at all predictive of AOM. Only direct examination of the middle ear by pneumatic otoscopy can make a correct diagnosis.

These principles were also set forth in 2004 when the American Academy of Pediatrics published practice guidelines for diagnosis of AOM. Three criteria were required for diagnosis of AOM:

1. Signs/symptoms of acute infection
2. Presence of middle ear fluid on direct examination
3. Signs of acute inflammation on direct examination

You can read the original document on line in Diagnosis and Management of Acute Otitis Media, May 2004 at *http://aappolicy.aappublications.org/cgi/content/full/pediatrics;113/5/1451*

Infectious Disease Updates
Rosalyn Singelton, MD, MPH
Making the CASE for Vaccines

As providers, with increasing frequency, we counsel parents who are hesitant about vaccines. Some of the fear started with the 1996 *Lancet* article, which alleged a connection between MMR and autism. Although science shows no link, and the article has been retracted by *Lancet*, it's hard to "unscare" people. Communication with parents is key. The good news is that 85% of parents want to be convinced and believe the information they receive from their pediatrician. We learned this helpful acronym for communicating with parents in a presentation by Alison Singer of the Autism Science Foundation at the National Immunization Conference:

- Corroborate: Acknowledge the parents' concern and find some point on which you can agree. This sets the right tone.
- About me: Describe what you have done to build your knowledge base and expertise.
- Science: Describe what the science says.
- Explain/Advise: Give advice to parent, based on the science. "I recommend these vaccines for children I care for and for my own child, because I care about them and want to protect them."

Example

Question from parent: "I heard on TV that vaccines cause autism."

Corroborate: "There's certainly been a lot of coverage on television about vaccines and autism, so I can understand why you have questions."

About me: "I always want to make sure I'm up to date on the latest information so I can do what's best for my patients, so I've researched this thoroughly. In fact, I just came back from a professional conference."

Science: "The scientific evidence does not support a causal link. The CDC, AAP, the NIH all reviewed the data and reached the same conclusions. Dozens of studies have been done. None show a link."

Explain/Advise: "Vaccines are critical to maintaining health and well being. They prevent diseases that cause real harm. Choosing not to vaccinate children doesn't protect them from autism, but does leave them open to diseases. Kids need these vaccines."

More information is available at *www.autismsciencefoundation.org*.

Making a CASE for vaccines is as important as ever. California is currently facing its largest outbreak of pertussis since 1958, partly fueled by low immunization rates. Measles is imported into the country dozens of times a year, and outbreaks occur in settings with low immunization rates.

Recent literature on American Indian/Alaska Native Health
Jeff Powell, MD, MPH

Invasive Pneumococcal Disease and Pneumococcal Conjugate Vaccines

This spring, the AAP revised the Pneumococcal Conjugate Vaccine Policy to implement use of Prevnar 13 (PCV13). Because of this, it seems timely to consider two relevant publications on the topic of invasive pneumococcal disease (IPD). These articles, published in March and May, 2010, frame a national context and then shed light on Native American-specific issues pertaining to childhood *Streptococcus pneumonia* infections. Both studies evaluate the rates of IPD before and during implementation of widespread PCV vaccination with heptavalent vaccine (PCV7). Nationally, the FDA licensed PCV7 in 2000. PCV7 use began on a more limited basis with Native American children in 1997.

Kaplan, Barson et al. (*Pediatrics*. 2010;125;429-436) provide nationwide insight from a 15 year prospective surveillance study of invasive pneumococcal infections. This study looked at cases of systemic pneumococcal infection presenting to eight children's hospitals from 1994 through 2008. Rates of systemic pneumococcal infection declined markedly (a 65% decline through 2004, 426 cases to 151 cases). However, the rates of IPD then increased from 2005 to 2008 (35% in all) – reflecting concerns that non-PCV7 vaccine serotypes were causing the rise. Supporting this concern, this study showed that, indeed, the serotypes responsible for the increase include 19A (alone accounting for 46% of Non-PCV7 vaccine serotypes), as well as serotypes 1, 3, and 7F (together accounting for 21% of Non-PCV7 vaccine serotypes). An additional part of this study related to pneumococcal antibiotic resistance, which also increased significantly. Serotype 19A is related to increased antibiotic resistance.

Weatherholtz, Millar et al. (*Clinical Infectious Diseases*. 2010; 50(9):1238–1246) provide a detailed analysis of IPD among American Indians living in the southwestern US and receiving care at Indian Health Service hospitals. Over the years 1995 - 2006, the authors identified 1508 IPD cases among all ages, and 447 cases in children less than five years old. Conducting this study in primary care hospitals serving a distinct population, population-based rates of IPD were determined. The baseline rate of IPD for children under 5 years old was 222 per 100,000 population (many fold higher than for the US population). Serotyping was determined in nearly all of the identified cases. This Navajo study further clarified the serotype results as Vaccine-Type (VT, meaning serotypes included in PCV7) versus Non Vaccine Type (NVT). Remarkably, by the end of the study period, the authors demonstrate the "near elimination of VT IPD." Of particular interest to southwestern Native American communities, this analysis showed no increase in NVT IPD among children 0 to 5 years old. This finding of stable NVT pneumococcal infection rates is important because of the contrast to other studies demonstrating increases in NVT pneumococcal disease in distinct populations (and as reflected in the study described above.) In particular in relation to AI/AN children, there was concern about "serotype replacement" due to previous findings in southwestern Alaska showing a large regional increase in NVT IPD after PCV7 implementation. Lastly, this Navajo population-based study reflects a strong likelihood that the 13-valent vaccine (PCV13) now recommended by AAP will allow further significant reductions in the incidence of IPD in American Indian and Alaska Native children. Forty Two percent of the 2004 – 2006 IPD cases can be accounted for by serotypes added into the PCV13 product (in particular serotypes 19A, 1, 7F, and 3).

These two studies provide insight into the burden of illness caused by IPD. Together, they add to the large body of literature supporting continued vigilance towards pneumococcal conjugate vaccine administration. There is still progress to be made, as the Weatherholtz et al. study shows a more than fourfold higher rate (89 cases per 100,000 population for the years 2006 - 2008) of NVT IPD among Navajo children less than 5 years old, compared to the all US rate. Perhaps the expansion to PCV 13 will help close this disparity.

Weatherholtz R, Millar E, Moulton L, et al. Invasive pneumococcal disease a decade after pneumococcal conjugate vaccine use in an American Indian population at high risk for disease. *Clinical Infectious Diseases*. 2010; 50(9):1238–1246.

Kaplan S, Barson W, Lin P, et al. Serotype 19A is the most common serotype causing invasive pneumococcal infections in children. *Pediatrics*. 2010;125;429-436.

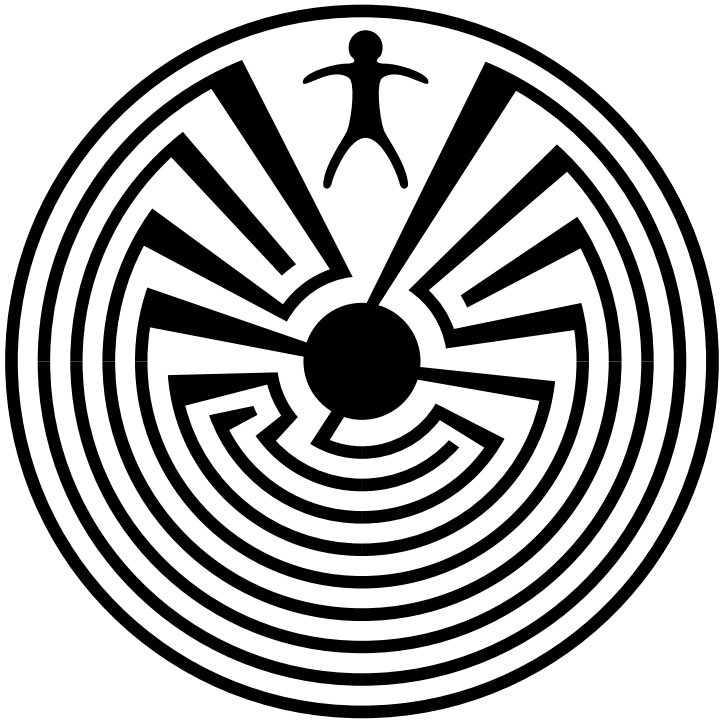
Erratum

The name of one of the authors of the article, *Indian Country: Get Yourself Talking, Get Yourself Tested! Presenting the 2010 GYTNOW Campaign*, in the April 2010 (Volume 35, Number 4, pages 75 - 76) issue of *The Provider* was inadvertently omitted. The byline should have included Wendee D. Gardner, MPH, ORISE Fellow, Office of Policy, Planning, and External Relations, Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia.

We apologize for this error.

Hepatitis B Guidelines for Your Clinic Room

We want to express our appreciation for the contribution of the guidelines published on the following two pages. They were written by Stephanie Chao, MD, Associate Director, Asian Liver Center, Stanford University, as a quick reference for clinicians with patients that have or may be at risk for chronic hepatitis B infection. Clinicians are encouraged to make copies for reference in their clinic offices. For more information about the Asian Liver Center, go to *http://liver.stanford.edu/*.



Preventing Perinatal Hepatitis B

ACIP & CDC Guidelines for Labor and Delivery and Newborn Nursery Units

Asian Liver Center at Stanford University

AT THE TIME OF ADMISSION

- Review the hepatitis B surface antigen (HBsAg) status of all pregnant women
- Refer to laboratory report for documentation of hepatitis B status
  (handwritten notes are subject to transcription errors)
- Perform HBsAg testing ASAP if there is no documentation of HBsAg status
- Women who test negative in early pregnancy (>6 months before delivery) may need retesting if they have engaged in behaviors that place them at risk for acquiring hepatitis B infection during pregnancy
  (eg. recent intravenous drug use, HBsAg-positive sex partner, multiple sex partners, recent treatment for a sexually transmitted disease)

AFTER DELIVERY

Recommended Administration of Birth Dose Hepatitis B Vaccine and Hepatitis B Immunoglobulin (HBIG) to be Given within 12 Hours of Birth

Maternal HBsAg§ Status	Recommendation			
	Infants ≥ 2,000 grams		Preterm infants < 2,000 grams	
	Birth Dose HBV Vaccine	HBIG	Birth Dose HBV Vaccine†	HBIG
HBsAg positive	✓	✓	✓	✓
HBsAg status unknown or pending	✓	Wait for HBsAg result*	✓	✓
HBsAg negative	✓		✓@ 1 month	

§ Hepatitis B surface antigen
* May give up to 7 days after birth
† Because of the potentially decreased immunogenicity of vaccine in preterm infants weighing <2,000grams, the birth dose vaccine should not be counted as part of the 3 doses received to complete the HBV vaccine series. A total of 4 doses should be given.

Hepatitis B Vaccines Acceptable for Birth Dose Administration: Single-Antigen Vaccine

- Recombivax HBV
- Engerix-B

AT HOSPITAL DISCHARGE

- Give infant's immunization record to mother and remind her to take it to infant's first pediatrician visit
- Encourage mother to make sure her infant completes 3-shot HBV vaccination series within 6 months
- Notify Perinatal Hepatitis B Prevention Program of your local public health department of all births to women with positive or unknown HBsAg status within 24 hours. Call your local public health department for the appropriate forms.

For more information, visit: http://liver.stanford.edu or www.hepBmoms.org

Guidelines are abridged from the recommendations set forth by the Advisory Committee on Immunization Practices (ACIP) in the Morbidity and Mortality Weekly Report (MMWR), published by the Centers for Disease Control and Prevention (CDC), Coordinating Center for Health Information and Service, U.S. Department of Health and Human Services. MMWR 2005;54(No.RR-16)

HEP B MOMS.ORG Unite Against HBV and Liver Cancer Asian Liver Center at Stanford University

ALERT: CDC Expands Hepatitis B Testing Recommendations for Chemotherapy Patients

The Asian Liver Center at Stanford University

The U.S. Centers for Disease Control and Prevention (CDC) released new recommendations in September 2008, for health care providers to increase routine testing for chronic hepatitis B, the major cause of liver disease and liver cancer worldwide. The CDC now recommends routine hepatitis B surface antigen (HBsAg) testing for all Native Alaskans, people born in Asia and Africa, as well as testing additional at-risk populations, including persons who require immunosuppressive therapy. Individuals chronically infected with hepatitis B are at increased risk for fulminant liver failure and death during chemotherapy or immunosuppressive therapy, and should be prophylactically placed on antiviral therapy, even if blood tests for liver enzymes are normal. Patients with resolved hepatitis B infection (HBsAg negative, anti-HBc positive) are still at risk for viral reactivation with immunosuppression, and need close monitoring for signs of liver disease. Below are specific testing recommendations and guidelines.

Recommended tests and interpretation for asymptomatic patients

Serologic Tests			
HBsAg[1]	**Total anti-HBc[2]**	**Anti-HBs[3]**	**Interpretation**
–	–	–	Never infected and no evidence of immunization
+	+	–	Chronic infection
–	+	+	Recovered from past infection and immune
–	–	+	Immune

[1]HBsAg: Hepatitis B surface antigen [2]Total anti-HBc: Antibody to hepatitis B core antigen [3]Anti-HBs: Antibody to HBsAg

Routine testing is key to identifying chronically infected persons so that they can receive life-saving care and treatment and prevent deaths from liver failure or liver cancer. The CDC estimates that 800,000-1.4 million Americans have chronic hepatitis B infection. Alaska Natives have particularly high rates of liver disease and many are chronically infected with hepatitis B. Most have no symptoms and are unaware of their disease.

Populations recommended or required for routine testing for chronic hepatitis B virus (HBV) infection

Population	Recommendations and Rationale
Persons needing cytotoxic or immunosuppressive therapy, including chemotherapy, immunosuppression related to organ transplantation, and immunosuppression for rheumatologic or gastroenterologic disorders	• Serologic testing should test for all markers of HBV infection (HBsAg, anti-HBc, and anti-HBs) • Chronically infected (HBsAg-positive) patients are at elevated risk of fulminant hepatitis once suppressive therapy is initiated and should be referred for medical management and anti-viral treatment • Those with resolved infection (anti-HBc positive, HBsAg negative) are at risk for reactivation and should be monitored closely with blood tests for liver enzymes
Persons born in regions of high and intermediate HBV endemicity	• Includes Alaska Natives, all persons born in Asia, Africa, and select countries in other regions*
U.S.-born persons not vaccinated as infants whose parents were born in regions with high HBV endemicity (≥8%)	• Test for HBsAg • Includes children of parents born in most Asian or Pacific Islands countries, among others*
Household, needle-sharing, or sex contacts of persons known to be HBsAg positive	• First vaccine dose should be given at the same visit as testing for HBsAg • Testing for anti-HBc and/or anti-HBs should be performed as well to identify susceptible persons • Susceptible persons should complete 3-dose hepatitis B vaccine series to prevent transmission from ongoing exposure

*For a complete list of geographic regions, refer to MMWR 2008;57(No.RR-8)

For more information, visit: http://liver.stanford.edu or www.cdc.gov/mmwr/PDF/rr/rr5708.pdf

Recommendations are abridged from the Morbidity and Mortality Weekly Report (MMWR), published by the Centers for Disease Control and Prevention (CDC), Coordinating Center for Health Information and Service, U.S. Department of Health and Human Services. MMWR 2008;57(No.RR-8)

MEETINGS OF INTEREST

Advancements in Diabetes Seminars
Monthly; WebEx

Join us monthly for a series of one-hour WebEx seminars for health care program professionals who work with patients who have diabetes or are at risk for diabetes. Presented by experts in the field, these seminars will discuss what's new, update your knowledge and skills, and describe practical tools you can use to improve the care for people with diabetes. No registration is necessary. The accredited sponsors are the IHS Clinical Support Center and IHS Nutrition and Dietetics Training Program.

Upcoming seminars include:

- **August 19, 2010**
  Advanced diabetes management Case Studies by Jo Ellen Habas, MD
- **September 8, 2010**
  Exercise and Cardiometabolic Risk Reduction in Diabetes and Prediabetes by Ralph La Forge

For information on upcoming seminars and/or previous seminars, including the recordings and handouts, click on this link and see Diabetes Seminar Resources: *http://www.diabetes.ihs.gov/index.cfm?module=trainingSeminars*

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*.

The Pharmacy Practice Training Program: a program in patient-oriented practice (PPTP)
August 23 - 26, 2010; Scottsdale, Arizona

The goal of this four-day training program for pharmacists employed by the Indian Health Service or Indian health programs is to improve the participant's ability to deliver direct patient care. This program encompasses the management of patient care functions in the areas of consultation, communication, interviewing techniques, laboratory test interpretation, conflict resolution, physical assessment, and disease state management. The course is made up of case studies that include role playing and discussion and provides 27 hours of pharmacy continuing education. It will be held at the Chaparral Suites Hotel, 5001 North Scottsdale Road, Scottsdale, Arizona 85258. For more information, look for "Event Calendar" at *http://www.csc.ihs.gov/* or contact CDR Ed Stein at the IHS Clinical Support Center by e-mail at *ed.stein@ihs.gov*.

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 as attachments by e-mail to john.saari@ihs.gov. Please include an e-mail address in the item so that there is a contact for the announcement. If there is more than one position, please combine them into one announcement per location. Submissions will be run for four months and then will be dropped, without notification,, 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 ($100 for four months). The Indian Health Service assumes no responsibility for the accuracy of the information in such announcements.

Family Practice Physician
Western Oregon Service Unit (a.k.a. Chemawa); Salem, Oregon.

The Western Oregon Service Unit is a comprehensive ambulatory care facility located on the campus of the BIA's Chemawa Indian Boarding School. Chemawa serves not only the 420 high school teens who come to the boarding school every fall, but urban and regional beneficiaries as well.

Staffed with two family practice physicians and one family nurse practitioner, Chemawa is currently recruiting for a board certified/board eligible family medicine physician. If selected for the position, you would have a federal position, competitive salary, the absence of call, and have week-ends, holidays, and nights free to enjoy the urban lifestyle of Oregon's state capitol, Salem. Salem has moderate weather and easy access to the Pacific Ocean, the Cascade Mountains, the high desert, Portland, and the renowned viticulture of the Willamette Valley.

For more information, contact CAPT Les Dye at *leslie.dye@ihs.gov*. (8/10)

Emergency Department Physician
Family or Pediatric Nurse Practitioner
Physician Assistant
Sells Service Unit; Sells, Arizona

The Sells Service Unit (SSU) in southern Arizona is recruiting for a board certified/board eligible physician (family practice, internal medicine, or emergency medicine) to join our experienced medical staff and work in our emergency department. We are also recruiting for a family/pediatric nurse practitioner or physician's assistant for our school health program and a family nurse practitioner for the Sells Hospital outpatient department.

The SSU is the primary source of health care for approximately 24,000 people of the Tohono O'odham Nation. The service unit consists of a Joint Commission accredited 34-bed hospital in Sells, Arizona and three health centers: San Xavier Health Center, located in Tucson, the Santa Rosa Health Center, located in Santa Rosa, and the San Simon Health Center located in San Simon, with a combined caseload of approximately 100,000 outpatient visits annually. Clinical services include family medicine, pediatrics, internal medicine, prenatal and women's health care, dental, optometry, ophthalmology, podiatry, physical therapy, nutrition and dietetics, social work services, and diabetes self-management education.

Sixty miles east of the Sells Hospital by paved highway lies Tucson, Arizona's second largest metropolitan area, and home to nearly 750,000. Tucson, or "The Old Pueblo," is one of the oldest continuously inhabited sites in North America, steeped in a rich heritage of Indian and Spanish influence. It affords all of southern Arizona's limitless entertainment, recreation, shopping, and cultural opportunities. The area is a favored tourist and retirement center, boasting sunbelt attributes and low humidity, with effortless access to Old Mexico, pine forests, snow sports, and endless sightseeing opportunities, all within a setting of natural splendor.

We offer competitive salary, relocation/recruitment/retention allowance, federal employment benefits package, CME leave and allowance, and loan repayment. For more information, please contact Peter Ziegler, MD, SSU Clinical Director at (520) 383-7211 or by e-mail at *Peter.Ziegler@ihs.gov*. (8/10)

Internal Medicine/Family Practice Physician
White Earth IHS Health Center; Ogema, Minnesota

We are recruiting for two positions for our beautiful White Earth Health Center. We are located in northwestern Minnesota. We are a freestanding outpatient-only facility with no hospital or ER responsibilities. We are open Monday through Friday, 8:00 am - 4:30 pm. In addition to our main clinic in Ogema, we also have two satellite clinics located in two other reservation communities. We are very honored and humbled to serve primarily the White Earth Band of the Anishinaabe People. Our clinic is looking for energetic, creative physicians who have a passion for delivering excellent primary care. Our schedule also gives our providers the opportunity to live a full life outside of the clinic with no evening, weekend, or holiday responsibilities. The White Earth Clinic is a Federal IHS facility, and we accept either a Minnesota State license or out of state (unrestricted license to practice medicine).

Ogema is approximately 220 miles northwest of Minneapolis and 60 miles east of Fargo, North Dakota. There are literally hundreds of lakes and resorts located around our

area. Detroit Lakes, Minnesota, a city of 8,000, is located 20 miles from the clinic. Approximately half of our employees reside in Detroit Lakes, with the other half living in small towns and on lakes in the area around the clinic. Fishing, hunting, cross country and downhill skiing, hiking, boating, swimming, and biking are just a few of the activities that are enjoyed by the people who live in our area. Detroit Lakes has recently been named one of the top ten lakes for boating in the nation by a leading outdoor magazine.

We offer a very competitive salary with loan repayment and bonuses definitely available for negotiation. We are excited and willing to offer a very attractive package to the physician who would fit into our vision of world class health care for the native people.

For more information please feel free to contact Zane Rising Sun, MD, Clinical Director, or Bryce Redgrave, CEO, at (218) 983-4300. (8/10)

Family Physician
SouthEast Alaska Regional Health Consortium; Juneau, Alaska

The SEARHC Ethel Lund Medical Center in Juneau, Alaska is searching for a full-time family physician with obstetrics to join a great medical staff of 14 providers (ten physicians and four midlevels) at a unique clinic and hospital setting. Have the best of both worlds by joining our practice where we share hospitalist duties one week every 6 - 8 weeks, and spend our remaining time in an outpatient clinic with great staff and excellent quality of life. We have the opportunity to practice full spectrum family medicine.

Work in Southeast Alaska with access to amazing winter and summer recreational activities. Live in the state capital with access to theater, concerts, annual musical festivals and quick travel to other communities by ferry or plane. Consider joining a well rounded, collegial medical staff at a beautiful clinic with generous benefits. For more information, contact Dr. Cate Buley, Assistant Medical Director, Ethel Lund Medical Center, Juneau, Alaska; telephone (907) 364-4485; e-mail *cbuley@searhc.org*; or go to *www.searhc.org* to learn more. (8/10)

Family Practice Physician
Yakama Indian Health Center; Toppenish, Washington

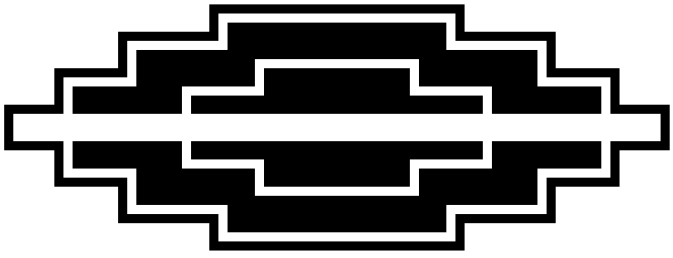
The Yakama Indian Health Center is recruiting for two positions in family practice, pediatrics, or internal medicine to join our staff of four physicians, three ARNP, and two PA-C. We are a modern facility with on-site pharmacy services, an open access appointment system, electronic health records, a moderately busy outpatient practice, and a user population of 10,000 members of the Confederated Tribes and Bands of the Yakama Nation.

Located 150 miles southeast of Seattle in the Yakima Valley, Toppenish has a lot to offer both the outdoor enthusiast and the urban sophisticate. Hunt, fish, or golf during the day, then attend a Broadway musical at the Capitol Theatre in Yakima. Skiing at White Pass or Crystal Mountain is only an hour away, and the Yakama Nation Museum and Cultural Heritage Center in downtown Toppenish stays open seven days a week.

Base salaries depend upon experience, and range from $155,000 to $177,000. Other benefits may include loan payback, retention or recruitment bonuses, and moving expenses. For more information, please call our Clinical Director, Rex Quaempts, or our Management Analyst, Pam Leslie at (509) 865-2102. This advertisement will stay open until both positions are filled. (7/10)

Family Practice Physician
Warm Springs Health and Wellness Center; Warm Springs, Oregon

The Warm Springs Health and Wellness Center has an opening for a board certified/eligible family physician. Located in the high desert of central Oregon, we have a clinic that we are very proud of and a local community that has much to offer in recreational opportunities and livability. Our facility has been known for innovation and providing high quality care and has received numerous awards over the past ten years. We have positions for five family physicians, one of whom recently retired after 27 years of service. Our remaining four doctors have a combined 62 years of experience in Warm Springs. This makes us one of the most stable physician staffs in the IHS. Our clinic primarily serves the Confederate Tribes of Warm Springs. We have a moderately busy outpatient practice, with our doctors seeing about 15 - 18 patients per day under an open access appointment system. We were a pilot site for the IHS Innovations in Planned Care (IPC) project and continue to make advances in how we provide care to our patients. We fully utilize the IHS Electronic Health Record, having been an alpha test site for the program when it was created. We provide hospital care, including obstetrics and a small nursing home practice, at Mountain View Hospital, a community hospital in Madras, Oregon. Our call averages 1 in 5 when fully staffed. For more information, please call our Clinical Director, Miles Rudd, MD, at (541) 553-1196, ext 4626. (4/10)



Dept. of Health and Human Services
Indian Health Service
Clinical Support Center
Two Renaissance Square, Suite 780
40 North Central Avenue
Phoenix, Arizona 85004

PRESORTED STANDARD
POSTAGE AND FEES PAID
U.S. DEPT. OF HEALTH & HUMAN SERVICES
PHOENIX, AZ
PERMIT NO. 5691

CHANGE SERVICE REQUESTED

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300

Change of Address or Request for New Subscription Form

Name _____ **Job Title** _____

Address _____

City/State/Zip _____

Worksite: ☐ **IHS** ☐ **Tribal** ☐ **Urban Indian** ☐ **Other**

Service Unit (if applicable) _____ **Last Four Digits of SSN** _____

Check one: ☐ **New Subscription** ☐ **Change of address**

If change of address, please include old address, below, or attach address label.

Old Address _____

THE IHS PRIMARY CARE PROVIDER
A journal for health professionals working with American Indians and Alaska Natives

THE IHS PROVIDER is published monthly by the Indian Health Service Clinical Support Center (CSC). Telephone: (602) 364-7777; fax: (602) 364-7788; e-mail: *the.provider@ihs.gov.* Previous issues of THE PROVIDER (beginning with the December 1994 issue) can be found on the CSC Internet home page *(http://www.ihs.gov/Provider).*

Opinions expressed in articles are those of the authors and do not necessarily reflect those of the Indian Health Service or the Editors.

Circulation: The PROVIDER (ISSN 1063-4398) is distributed to more than 6,000 health care providers working for the IHS and tribal health programs, to medical schools throughout the country, and to health professionals working with or interested in American Indian and Alaska Native health care. If you would like to receive a copy, send your name, address, professional title, and place of employment to the address listed below.

Publication of articles: Manuscripts, comments, and letters to the editor are welcome. Items submitted for publication should be no longer than 3000 words in length, typed, double-spaced, and conform to manuscript standards. PC-compatible word processor files are preferred. Manuscripts may be received via e-mail.

Authors should submit at least one hard copy with each electronic copy. References should be included. All manuscripts are subject to editorial and peer review. Responsibility for obtaining permission from appropriate tribal authorities and Area Publications Committees to publish manuscripts rests with the author. For those who would like more information, a packet entitled "Information for Authors" is available by contacting the CSC at the address below or on our website at *www.csc.ihs.gov*.