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## Elder Food Safety Initiative: A Review of the Home Meal Delivery Process in Tribal Elder Nutrition Programs

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### Background

Food safety is an important public health concern. According to the Centers for Disease Control and Prevention (CDC), it is estimated that in the United States, 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths are attributed to food borne illness each year. Significant causes of food borne illness include viruses, bacteria, parasites, toxins, and metals. Food borne illness symptoms vary from mild gastroenteritis to life-threatening neurological, hepatic, and renal syndromes.<sup>1</sup> The annual cost of food borne illness in the United States is enormous, with estimates ranging from \$10 to \$83 billion.<sup>2</sup>

Food safety is especially important among elders, a highly susceptible population, as food borne illness may result in serious or long-term health consequences. The elder population represents the largest at-risk segment of the US population for food borne illness.<sup>3</sup> Reasons why elders are the largest at-risk population include having a weakened immune system, inflammation of the stomach lining, a decrease in stomach acid, and a decline in sense of taste and smell.<sup>2</sup> Compounding health concerns about elders is the projection that the population of elders 65 and older will increase 147% between the years 2000-2050.<sup>4</sup>

Elder Nutrition Programs (ENPs) were founded in 1972 and were authorized by Congress under Title VII (now Title III) of the Older Americans Act.<sup>5</sup> The ENPs provide congregate and home delivered meals to people age 60 years and older, particularly to low-income elders, and are the largest community nutrition program in the United States.<sup>6-7</sup> There are many unique food safety challenges that ENPs nationwide face each year. These include serving and preparing food to a highly susceptible population, maintaining proper temperatures over long distances, high staff turnover, and delayed consumption of the home delivered meal, all of which increases the chances of food borne

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illness.<sup>8</sup> Other challenges include funding for the program and lack of volunteers. Elders themselves can also contribute to or increase the risk of food borne illness. A combination of a limited household budget, long held feelings against wasting food, and memory loss may further result in home meal delivery recipients keeping foods too long or improperly handling them.<sup>9</sup>

Approximately 61% of American Indian and Alaska Native (AI/AN) elders live in poverty, live in poor housing conditions, and are without access to adequate health care.<sup>10</sup> These contributing factors specific to AI/AN may elevate the risk of food borne illness above that of the general elder population.

The Indian Health Service (IHS), Division of Environmental Health Services, Reno District Office, conducts annual comprehensive environmental health surveys at tribal ENPs. The Reno District IHS Environmental Health Services Program consists of five Environmental Health Officers (EHOs) providing environmental health services to 35 tribes/colonies, which are dispersed throughout Nevada, Utah, and southeastern California. Tribal enrollments vary from a few hundred to a few thousand. Prior to this initiative, routine surveys had focused on the on-site food safety, with less attention given to the home meal delivery process. In addition, during recent routine surveys, the Reno District IHS staff were informed of several undesirable food safety practices that were occurring as part of the delivery process, such as leaving meals outside the home, entering the home to leave a meal when no one was home, and failure to monitor food temperatures during delivery. Given these factors, the Reno District IHS staff developed an elder food safety initiative to assess food safety risks among home delivered meal recipients at seven participating tribal elder nutrition programs in summer and fall 2005.

## Methods

For tribes in the Reno District IHS service area to participate in this initiative, the tribes had to meet specific inclusion criteria: 1) the tribe must have an ENP Program, 2) the ENP must home deliver at least 20 meals, and 3) the ENP must be interested in participating in the program. The participating ENP programs were identified after discussing the initiative with the ENP director, health director, and ENP staff.

The ENP food safety initiative included two types of assessments: an on-site food safety assessment and a questionnaire to assess the elder's food safety knowledge. The first assessment consisted of an unannounced site assessment of the ENP to identify food safety risks during the facility operation and home delivery process. Food safety risks were determined by visually observing and monitoring the entire operation of the ENP and documenting findings on a data collection form. This form was comprehensive and included the assessment of: 1) facility operations, 2) delivery preparation, and 3) delivery process. A control plate (an extra meal) was used to monitor food temperatures of the home

delivered meal during the delivery trips.

The on-site food safety assessment form was based on the Food and Drug Administration (FDA) Food Code and the FDA Baseline Data Collection form that focuses on the five CDC identified contributing factors for food borne illness. These factors include food from unsafe sources, inadequate cooking, improper holding time and temperature, personal hygiene, and prevention of contamination.

The self-administered questionnaire evaluated food safety knowledge, attitudes, and practices among the elders who participated in the nutrition program. The questionnaire, which was distributed by ENP staff at their respective programs, consisted of eleven questions, and was distributed to both the elders who received meals at the ENPs and the elders who received meals at home. Food safety thermometers were provided to elders as an incentive for returning the completed questionnaire.

## Results of the Site Assessment

Seven ENPs participated in the elder food safety initiative. Collectively, these centers delivered 250 meals a day and served another 100 on site. The number of meals delivered at each center ranged from 20 to 75, and 43% (3/7) of programs utilized at least two vehicles for meal delivery. Thus, a total of eleven delivery processes were assessed. Five ENPs (71%) purchased and transported some of their food items while all ENPs received some food products from a food distributor. Results of the site assessment for hot potentially hazardous foods (PHFs) are summarized in Table 1 (see next page). Results of the site assessment for cold PHFs are summarized in Table 2 (see page 168). A PHF is a food that requires temperature control because it supports the growth of infectious or toxigenic microorganisms.<sup>11</sup>

*Transport Time.* Transport delivery times ranged from 40 minutes to almost 3 hours, with the average transport delivery time of 1.6 hours. The delivery time only included the time taken to deliver the meals and does not include the return time after the last meal had been delivered.

*Food Delivery and Transport Containers.* For the purpose of this initiative, the food delivery container refers to the container in which individual meals were placed, while the food transport containers were the larger containers in which the individual food delivery containers were collectively placed for transportation. The type of food delivery container used varied. Some programs utilized styrofoam, aluminum, or plastic food delivery containers, while most utilized a combination of these types. Food transport container types also varied depending on the type of food. Most used an insulated soft pack for hot holding. Only 14% (1/7) of ENPs used a heating pad for transporting hot foods. For cold transport, the types varied widely and ranged from soft insulated coolers, milk crates, or plastic lined containers. Nearly, 71% (5/7) of ENPs did not utilize cold packs for transporting cold foods.

*Food Temperatures.* Twenty-five (25) PHFs were monitored. Nine (9) were cold PHFs and sixteen (16) were hot PHFs. According to the FDA Food Code, a PHF should be at 41° F or below for cold holding or 135° F and above for hot holding.<sup>12</sup> Sixteen percent (4/25) of the PHFs were out of the recommended FDA food code temperature prior to leaving the elder nutrition program. Three of these were cold PHFs and

one was a hot PHF. By the end of the delivery, 76% (19/25) PHFs had fallen out of the recommended FDA food code temperature (14 hot and 5 cold foods).

*Facility Operation.* In addition to the delivery process, the food service operation of each ENP kitchen facility was evaluated. When reviewing the data, several critical operational issues were uncovered that could easily contribute

**Table 1. Meal delivery results for hot PHFs**

Program	Food Del. Container	Transport Container	Type of Food	Begin. Temp	End Temp	Temp Loss	Transport Time
ENP A Van #1	Styrofoam, plastic, & aluminum	Soft Insulated Pack	Meat sauce w/spaghetti noodles	159°F	105°F**	53°F	1 hour 34 minutes
ENP A Van #2	Styrofoam, plastic, & aluminum	Soft insulated pack	Meat sauce w/spaghetti noodles	116°F**	100°F**	16°F	1 hour 10 minutes
ENP B	Styrofoam	Soft insulated pack	Indian Tacos	183°F	95°F**	88°F	1 hour 55 minutes
ENP C	Styrofoam & Plastic	Soft insulated pack	Shepard's Pie	170°F	110°F**	60°F	1 hour 30 minutes
ENP D Van #1	Styrofoam & Aluminum	Hard Plastic Coolers	Chicken w/rice soup	176°F	151°F	25°F	1 hour 47 minutes
ENP D Van #2	Styrofoam & Aluminum	Hard Plastic Coolers	Chicken w/rice soup	163°F	138°F	25°F	2 hours and 47 minutes
ENP E *Van #1	Styrofoam & Plastic	Soft Insulated Pack	Chili Dog	175/182°F	105/104°F**	70/78°F	2 hours 47 minutes
ENP E *Van #2	Styrofoam & Plastic	Soft Insulated Pack	Chili Dog	174/185°F	130/113°F**	44/72°F	1 hour 14 minutes
ENP F (1 van/2 routes)	Styrofoam	Soft Insulated Pack	Baked Chicken Gravy Buttered Noodles	165°F 166°F 159°F	107°F** 116°F** 102°F**	59°F 50°F 59°F	45 minutes
ENP F (1 van/2 routes)	Styrofoam	Soft Insulated Pack	Baked Chicken Gravy Buttered Noodles	165°F 166°F 159°F	107°F** 116°F** 102°F**	59°F 64°F 57°F	40 minutes
ENP G	Aluminum & Styrofoam	Soft Insulated Pack	Minestrone Soup	190°F	135°F	55°F	50 minutes

\* Two food temperatures were taken during the delivery process as both Styrofoam and plastic were used to deliver the hot meal.

\*\* indicates food that was out of the recommended FDA food safety temperatures.

**Table 2. Meal delivery results for cold PHFs**

Program	Food Del. Container	Transport Container	Type of Food	Begin. Temp	End Temp	Temp Loss	Transport Time
ENP A	No Cold PHFs Served						
ENP B	Styrofoam	Soft Insulated Pack	Yogurt Milk	60°F* ** 43°F**	57°F** 49°F**	3°F 6°F	1 hour 55 minutes
ENP C	No Cold PHFs Served						
ENP D Van #1	Styrofoam & Plastic	Hard Plastic Cooler	Milk	39°F	41°F	2°F	1 hour 47 minutes
ENP D Van #2	Styrofoam & Plastic	Hard Plastic Cooler	Milk	41°F	43°F**	2°F	2 hours 47 minutes
ENP E *Van #1	Styrofoam & Plastic	Plastic milk crate	Coleslaw	39°F	60°F**	21°F	2 hours 47 minutes
*ENP E Van #2	Styrofoam & Plastic	Plastic milk crate	Coleslaw	39°F	63°F**	24°F	1 hour 14 minutes
ENP F (1 van/2 routes)	Styrofoam	Soft Insulated Pack	Milk	41°F	43°F**	2°F	45 minutes
ENP F (1 van/2 routes)	Styrofoam	Soft Insulated Pack	Milk	41°F	45°F**	4°F	40 minutes
ENP G	Aluminum & Styrofoam	Hard Plastic Cooler	Chicken Salad Sandwich	69°F* **	59°F**	10°F	50 minutes

to the occurrence of a food borne illness, as they occurred at a critical point in the food service process. A critical point in the food service process, formerly known as a Critical Control Point (CCP) is any point or procedure in a specific food system at which a control can be applied and a food safety hazard can be prevented, eliminated, or reduced to acceptable levels.<sup>13</sup> Fourteen CCPs were identified and grouped into four categories as part of the data analysis. These include time and temperature abuse, management and personnel, sanitization of equipment, and poor personal hygiene. While no one program had all 14 critical deficiencies, most programs had multiple critical deficiencies.

Moreover, the monitoring of food temperatures was a substantial concern in the ENP facility operation. One-hundred percent (7/7) of the ENPs were observed not checking and documenting final cooking temperatures. Furthermore, 86% (6/7) of ENPs were observed not monitoring food temperatures during home meal delivery. Eighty percent (4/5) of food temperatures were also not being monitored when employees transported food after purchase to the ENP and 100% (7/7) of food temperatures were not monitored when food was received on site from a food distributor.

*Safety.* It was also noted that when clients were not at home at the time of the meal delivery, 29% (2/7) of ENPs were entering homes to leave meals on counters, and 29% (2/7) were observed leaving meals outside the client's home in a cooler or milk crate. One ENP left 29% (16/56) of their meals outside with no knowledge of when the client would return.

### Results of the Questionnaire

From the 350 elders who received meals from the seven participating ENP programs, a total of 178 questionnaires were completed and returned, which represented a response rate of 51%. It should be noted that not all respondents answered all questions. Of the returned questionnaires, 73% (129/178) were completed by elders whose meals were exclusively home delivered, 21% (38/178) were completed by elders whose meals were exclusively eaten at the ENP, and 6% (11/178) were completed by elders whose meal delivery process varied between the two options. Of those who received home delivered meals, 73% (102/140) of elders ate their meal immediately upon receipt, while 9% (13/140) placed their meal in the refrigerator, 6% (9/140) placed their meal on the counter, 6% (8/140) in the oven, and 6% (8/140) reported doing something else with their

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meal other than the options listed on the questionnaire. When asked what happens to the meal if they were not home, 55% (74/134) stated that their meals were not delivered, 23% (31/134) had their meals left outside, 13% (17/134) reported having their meals left on the counter, 8% (11/134) stated that their meals were placed in the refrigerator, and 1% (1/134) reported their meal being placed in the oven. Nearly, 91% (153/169) of elders did not own a food thermometer and 82% (138/169) reported they would like to have a food thermometer.

Ninety-six percent (157/178) of elders were not able to identify any types of food that they should avoid to reduce the risk of food borne illness. Seventy-five percent (133/178) of elders reported that they were interested in learning about food safety. Most (66%, or 117/178) were interested in learning about food safety through flyers delivered to the home, 14% (25/178) preferred tribal newsletter articles, 10% (17/178) preferred learning through a food safety class, and 10% (19/178) preferred learning from all three methods.

### Discussion of the Site Assessment

Food borne illness data in the Reno District were not available when conducting this initiative. The lack of food borne illness surveillance is a common problem in the United States and is attributed to underreporting or lack of diagnosis.<sup>1</sup> The majority of information found on home delivered meals for elder programs focuses on nutritional content of meals. This project sought to assess home delivered meals in regards to food safety.

The significant change in food temperatures during delivery may be attributed to the type of transport container used and the lack of or improper use of supplemental heating units for the hot PHFs and the nonuse of supplemental cooling units or ice packs for cold PHFs.

*Hot PHFs.* With the exception of one delivery vehicle, all hot PHFs were above 135° F prior to leaving the ENP. For the transport of hot PHFs, most ENPs utilized a type of zipped insulated thermal bags. When researching the specifications of this product, there was no assurance that the bags could maintain hot food temperatures. Rather, the bags were advertised as high efficiency units with no mention of temperature maintenance. Upon contacting the manufacturer, it was reported that the bags will keep a full container of food trays loaded at 185° F above 140° F for an hour, and longer if the bag is not opened and closed throughout the course of delivery. Given this information, the high heat loss could have been attributed to several factors. First, only 1 hot PHF was loaded at 185° F. Furthermore, ENP staff were observed failing to re-zip the thermal transport bags between meal delivery stops, which increases heat loss. Also, the average delivery times were 62% greater than what the insulated thermal bags were rated for (1.6 hours versus 1 hour).

Other contributing factors to the decrease in hot PHF temperatures were the misuse or lack of supplemental heating units in the food transportation containers. Supplemental heating units help to maintain food temperatures in the range of

140° F to 160° F through the gradual release of stored heat. To properly prepare the supplemental heating unit (e.g., heat bottle), it must be placed in boiling water for 15 to 20 minutes. It should then be placed upright between two columns of trays or upright at the back side of the bag. Only one of the seven ENPs utilized supplemental heating units. However, the ENP that did utilize the supplemental heating units incorrectly prepared and placed them. They warmed the supplemental heating units in the dishwasher and placing them in the top exterior sleeve of the thermal transport container, which is inconsistent with the manufacturer's instructions. With average transport times of 1.6 hours, supplemental heating units and their proper use appear to be necessary in order to maintain proper temperatures when using the zipped insulated thermal bags as the food transport containers. When discussing temperature loss, it should be mentioned that one ENP utilized hard plastic coolers for the transport of hot food items. Food temperatures for these two delivery processes were delivered within the recommended food safety range. The type of food, (soup) and the type of food delivery container (covered styrofoam cups) may have influenced the temperature retention during delivery. Hard plastic coolers should be further evaluated, using varying hot food types and varying transport times, to better determine their effectiveness as a hot food transport container.

*Cold PHFs.* Three of the nine cold PHFs were above 41°F prior to leaving the ENP. This was due to improper cold holding techniques prior to delivery. By the end of the delivery process, only one of the nine cold PHFs was below 41°F. The type of container used to transport cold foods varied widely, from crates to hard plastic coolers to insulated bags. Only one out of seven programs used cooling elements such as ice packs when delivering cold PHFs. Failure to use such items was believed to have caused the temperature increases seen during the site assessment.

*Temperature Findings.* The loss-of-temperature findings in the on-site assessment were consistent with the findings in one study located via an exhaustive literature review. In a study conducted through the University of Minnesota, meals provided by a home delivered meal program were evaluated for five consecutive days annually for a period of six years. During this time, food safety temperatures of home delivered meals were monitored. Findings demonstrated that temperatures of delivered hot foods were often much lower than recommended food safety temperatures despite annual recommendations to increase food temperatures and to deliver meals quickly.<sup>14</sup>

Prior to the on-site assessment from this initiative, it was initially believed that "time as a public health control" could be used to address temperature loss issues associated with the home delivery process. The FDA Food Code allows for time only to provide the public health control for PHFs when the PHF is eaten or discarded within four hours of removal from temperature control (e.g., cooking process, proper hot storage, or proper cold storage.) This Food Code component does not allow for the refrigeration or reheating of the PHF after the

four-hour period. Also, several initiative findings suggest that “time as a public health control” for the home delivery process may provide insufficient protection. These findings include the failure to monitor cooking temperature at the kitchen facilities, delivery times as long as almost three hours, and the fact that 27% of the questionnaire respondents reported doing something other than immediately eating the delivery meal upon receiving it. Thus, it is strongly recommended that the ENP programs should deliver their meals to elders at the proper temperature (e.g., either above 135°F for hot foods or below 41°F for cold foods) and stress that if they are not eaten right away they should be refrigerated and reheated.<sup>15</sup>

As mentioned in the results section, 14 critical control points (CCPs) were identified at the ENP kitchen facilities. The most significant CCPs include: failure to monitor and document the temperatures of food transported to the facility by ENP staff (80%), failure to monitor and/or document the temperature of food obtained by the food distributor (100%), failure to monitor and document final food cooking temperatures (100%), failure to monitor and document food delivery temperatures (86%), and lack of food safety education among delivery drivers and management (100%). Most of the operational issues were due to the lack of standard operating procedures (SOPs), and the lack of food safety education was largely due to high staff turnover and lack of awareness of the need for education. Both, the lack of SOPs during critical operational processes and lack of food safety education are key contributing factors to increasing food safety risk, and must be addressed.

### Discussion of the Questionnaire

Much is known about the elder population as a highly susceptible population, but little is known about their food safety practices at home and their general understanding of food safety.<sup>15</sup> From the questionnaire, it was determined that approximately 73% (102/140) of elders who receive home-delivered meals consume them right away. This statistic is higher than other studies regarding meal disposition of home-delivered meals among elders. In a study conducted by Asp and Darling, it was noted that approximately one-half of home delivered meal recipients saved their meal for later consumption.<sup>3</sup> In another study by Lau et al, it was reported that only 12% of 400 clients were consuming their home delivered meals in their entirety after delivery.<sup>16</sup> While the immediate consumption of meals by the elders in this initiative was higher than other studies, it still indicates that almost 1/4 (27%) are delaying consumption of their delivered meals. Delayed consumption is a considerable food safety risk to the elder population when food is not delivered within the recommended food temperature safety range. Elders should be encouraged to eat their meal immediately upon receipt.

Another significant finding from the questionnaire was meal delivery practices when the client was not at home. Fifty-five percent (74/134) of elders responded that their meals were not delivered when away. However 45% (60/134) of elders stated that their meals were either left outside, or placed on the

counter, in the refrigerator, or in the oven. Because elders are a highly susceptible population, the practice of leaving the meals outside the home (e.g., usually in a cooler or milk crate with no ice pack) or leaving them on a counter inside the home without temperature control poses a substantial health risk. Issues relating to potential contamination of the food, cleanliness of the cooler, and keeping foods out of the temperature danger zone should be a liability concern for the ENPs as well as a food safety risk to the consumer. In addition, allowing the delivery driver to enter into the home while the elder was away could lead to problems with theft or the accusation of theft.

A secondary objective of the questionnaire was the need to determine necessity of, interest in, and focus for food safety education among elders. Approximately, 88% (157/178) of elders were unable to identify foods that should be avoided to reduce their risk of food borne illness. Yet, elders indicated a strong interest in food safety education and gave their preferred methods of communication. This initiative did not include a food safety educational component as it was felt that addressing operational deficiencies and equipment needs was more critical. However, such activities should be planned and implemented in the future.

### Interventions

Based on the findings from the site assessment, it was clearly evident that SOPs and improved hot holding and cold holding equipment were needed. The equipment related interventions were not implemented during this initiative due to the lack of funding. Nevertheless, recommendations regarding equipment were made. Since there was no cost associated with developing or implementing the SOPs, they were implemented immediately during this initiative.

Nine SOPs were introduced based on the operational food handling deficiencies for each participating center. Plans from the Iowa State University Hazard Analysis Critical Control Point (HACCP) website were used as models. HACCP is a scientific and rational approach to food safety, which identifies and analyzes potential hazards in the food process and develops monitoring procedures to determine if the hazards identified are being effectively controlled.<sup>17</sup> The nine SOPs included policies as well as food temperature logs for monitoring final cooking, holding, refrigeration, and delivery temperatures. A weekly manager’s HACCP checklist was also included to promote internal inspections.

Equipment with the ability to maintain proper food temperatures during meal delivery is essential to the reduction of temperature change for the hot and cold PHFs. After numerous discussions with food safety experts and Meals-On-Wheels staff, the Nutri-System electric thermal bags were recommended to participating ENPs as a future equipment intervention. This product was recommended for several reasons. First were price and the capability to maintain temperature. Ideally, specialized delivery vehicles with both hot and cold compartments would have been recommended. However, the affordability of such vehicles was an issue for the tribal ENPs. The thermal bags were

affordable and, even when not zipped, have the ability to maintain proper temperatures, as heat is continuously provided via an electric bag heater plugged into the vehicle cigarette lighter. Other reasons for recommending this product include durability, ease of cleaning, holding capacity, and weight of the bag with electric heater versus the weight of a bag with a heating unit. Although this equipment related intervention was not implemented, much research was conducted on this product and much effort was expended in an effort to locate a funding source. Recommendations were made to ENPs to purchase both hot and cold holding equipment as funding becomes available.

Once the equipment intervention is implemented, an evaluation should be conducted to monitor and assess the impact and outcome of the interventions. An evaluation component is essential to determine the effect of the SOPs and the equipment related intervention. It is also important to note that two of the participating programs were awarded delivery vehicles during this initiative. Findings from the ENP initiative were utilized in a support letter to justify the need for the delivery vehicle for one of the participating ENPs.

### Conclusions

ENPs fulfill valuable nutritional and social roles in their communities. Prior environmental health surveys have focused on the ENPs kitchen, with no focus on the home meal delivery process. This initiative identified major problems in the home meal delivery process that could increase the health risk to elders. The initiative also recommended possible solutions to identified food safety problems that included the implementation of SOPs and the use of both hot and cold holding equipment. Lastly, the initiative identified the need for training for elders regarding food safety. As the elder population grows, so will the need for assuring good food safety practices.

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# The American Indian Breast Health Advisory Council Presents the New American Indian Ribbon of Life

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Each American Indian tribe has its own unique culture, rich with meaningful rituals and traditions. Yet, there are some rituals that are common threads, creating a cultural and spiritual connection between tribes. One such ritual, common to many tribes, is the gifting of a feather to a loved one.

Many tribes believe that birds such as eagles, hawks, or crows are messengers for the creator, and are therefore sacred; the feathers of these birds embody their spirit. Beliefs about which birds are sacred vary from tribe to tribe. Some tribes, such as the Lakota, believe that an eagle feather gives one strength, protection, and guidance. For the Lakota, an eagle feather might be gifted to a friend or loved one who has earned it because they have reached an important juncture in their life, such as coming into adulthood, graduating from college, or getting married. A feather may also be given to a loved one who is fighting cancer, or who has survived cancer, for spiritual protection and acknowledgement of their strength and valor.

“The eagle has the ability to see the bigger picture, to have a good vantage point, and to not have tunnel vision. This is an important quality for all people to have when it comes to breast cancer awareness,” said Rosalie Little Thunder, a Lakota linguist and cultural educator from the Rosebud Reservation of

South Dakota.

It is because of the spiritual significance of the feather to so many American Indian tribes that the University of California (UC), Davis Cancer Center American Indian Advisory Council came up with the idea of using a feather in the shape of the familiar pink ribbon, symbolizing breast cancer awareness, as a logo to reinforce the message of breast health and breast cancer prevention in our Native communities.

Kellie Stevens, a member of the Yerington Paiute Tribe of Nevada and an Advisory Council member, designed the new Ribbon of Life to take its place along with other Ribbons of Life specially designed for African Americans and Asian Americans.

The Council is responsible for the development of the Mother’s Wisdom Breast Health Program, a program of the UC Davis Cancer Center’s Outreach and Education Program, and it has the goal of addressing the unmet breast cancer prevention needs of American Indian women.

According to the American Indian/Alaska Native Cancer Information Resource Center and Learning Exchange (Native CIRCLE), historically, cancer used to be very rare among American Indians, and yet today it is the second leading cause of death among American Indians age 45 and older. Breast cancer is one of the leading types of cancer in American Indian and Alaskan Native women.

According to the National Cancer Institutes 2003 report, Native women, on average, have lower rates of breast cancer than women of other ethnic groups in the United States, and yet

An American Indian/Alaska Native

## Ribbon of Life

### To Support Breast Cancer Awareness and Education Among American Indian/Alaska Native Women

The gifting of a feather to a loved one is a common ritual among many American Indian/Alaska Native tribes. Wear this feather ribbon in acknowledgement of an American Indian woman who is fighting breast cancer, or who has survived breast cancer, and as a symbol of spiritual protection, strength, and guidance.

*A gift from the Mother’s Wisdom Breast Health Program and the UC Davis Cancer Center American Indian Advisory Council. Supported by the Susan G. Komen Breast Cancer Foundation and the UC Davis Cancer Center (1-916-734-5935).*



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the breast cancer death rate for Native women is higher. Marlene von Friederichs-Fitzwater, PhD, an assistant adjunct professor of hematology and oncology and director of the outreach program at the UC Davis Cancer Center, embarked on an effort to help change this. She met with tribal health educators and leaders throughout the country and learned that cancer, due to certain cultural beliefs, is a taboo subject in many American Indian communities.

“Many American Indians shun the use of the word “cancer” due to a concern or belief that saying the word will give it power or bring it forth,” von Friederichs-Fitzwater explained. Von Friederichs-Fitzwater also learned that American Indian women tend to focus on their children’s health over their own, and are therefore less likely to get regular health checkups and mammograms.

Von Friederichs-Fitzwater joined forces with Linda Navarro, a member of the Torres Martinez Desert Cahuilla Tribe. Navarro is the director of the Turtle Health Foundation, an American Indian-run health organization with connections to tribal and urban health programs in California. Together,

they created the Council with twelve Native women, and with the Council’s help, launched the Mother’s Wisdom Breast Health Program with an initial grant from the Susan G. Komen Breast Cancer Foundation.

The new American Indian Ribbon of Life will be made into pins for women to wear to create awareness about the need for breast cancer prevention programs in American Indian communities and will be distributed free along with copies of the Mother’s Wisdom Breast Health Program DVD to American Indian women throughout California.

For more information on the Mother’s Wisdom Breast Health Program or the American Indian Ribbon of Life, please contact Marlene von Friederichs-Fitzwater at [marlene.vonfriederichs-fitzwater@ucdmc.ucdavis.edu](mailto:marlene.vonfriederichs-fitzwater@ucdmc.ucdavis.edu); or telephone (916) 338-2396; or contact Linda Navarro at [lnavarro@turtlehealth.org](mailto:lnavarro@turtlehealth.org) or telephone (916) 677-2533.

*This article courtesy of the American Indian Breast Health Advisory Council and the Mother’s Wisdom Breast Health Program.*

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## New Nurse Educator at the Clinical Support Center

The Clinical Support Center staff is pleased to welcome LT Lisa Palucci as their new Nurse Educator/Consultant. LT Palucci is responsible for all CSC sponsored continuing education activities for nurses. She is charged with maintaining CSC’s national accreditation through the American Nurses Credentialing Center Commission on Accreditation as a provider of continuing nursing education. LT Palucci advocates for nursing education as an ex-officio member in the IHS National Nurse Leadership Council. She plans, develops, coordinates, implements, evaluates, and ensures quality continuing education programs for nurses at every practice level within all I/T/U settings.

LT Palucci, originally from Gallup, New Mexico, is a member of the Navajo Nation. She is a graduate of Corona del Sol High School in Tempe, Arizona and holds a Bachelor of Science degree in Nursing from Arizona State University. LT Palucci completed her Master of Science degree in Nursing from the University of Phoenix with honors and earned membership in Sigma Theta Tau International. Since 1998, Lisa has worked for the Indian Health Service at various locations throughout Arizona, including Fort Defiance and Phoenix. She is an IHS Scholarship recipient and began her career in the USPHS Commissioned Corp in 1999 as a pediatric staff nurse at Phoenix Indian Medical Center

(PIMC). She later completed the IHS Public Health Nursing (PHN) internship program and practiced as a PHN serving diverse tribes and communities in the Phoenix metropolitan area and the Navajo Nation. LT Palucci has been recognized for her exceptional service throughout her nursing career. Her awards include the Phoenix Area Director’s Exemplary Group Performance Award, PHS Commendation Medal for exceptional practice as a PHN at the Fort Defiance Service Unit, PHS Achievement Medal for outstanding performance as Acting Director of Public Nursing at PIMC, and PHS Citation for quality performance as Public Health Nurse Intern at PIMC.

Lisa is an active member of several professional associations. She served as secretary for the Phoenix Chapter of the Commissioned Officers Association from 2004 - 2006. She is a member of the Reserved Officers Association, the National Nursing Staff Development Organization, the National Alaska Native/American Indian Nurses Association, the Native American Nurses Association (PHX), and the Arizona State University Alumni Association. LT Palucci also serves as the Deputy Commander of the USPHS Phoenix Area Honor Guard.

Lisa replaces CDR Theodora (Dora) Bradley, who is now the Director of the CSC Office of Continuing Education.

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*Editor's Note: The following is a digest of the monthly Obstetrics and Gynecology Chief Clinical Consultant's Newsletter (Volume 4, No. 6, June 2006) available on the Internet at <http://www.ihs.gov/MedicalPrograms/MCH/M/OBGYN01.cfm>. We wanted to make our readers aware of this resource, and encourage those who are interested to use it on a regular basis. You may also subscribe to a listserv to receive reminders about this service. If you have any questions, please contact Dr. Neil Murphy, Chief Clinical Consultant in Obstetrics and Gynecology, at [nmurphy@scf.cc](mailto:nmurphy@scf.cc).*

## OB/GYN Chief Clinical Consultant's Corner Digest

### Abstract of the Month

#### **VariZIG replaces VZIG: Varicella prophylaxis for high risk persons (including pregnancy)**

On October 27, 2004, the Advisory Committee on Immunization Practices (ACIP) was informed by the only US-licensed manufacturer of varicella zoster immune globulin (VZIG) (Massachusetts Public Health Biologic Laboratories, Boston, Massachusetts) that the company had discontinued production of VZIG. The supply of the licensed VZIG product is now nearly depleted. In February 2006, an investigational (not licensed) VZIG product, VariZIG™ (Cangene Corporation, Winnipeg, Canada) became available under an investigational new drug (IND) application submitted to the Food and Drug Administration (FDA). This product can be requested from the sole authorized US distributor, FFF Enterprises (Temecula, California), for patients who have been exposed to varicella and who are at increased risk for severe disease or complications.

The investigational VariZIG, similar to licensed VZIG, is a purified human immune globulin preparation made from plasma containing high levels of anti-varicella antibodies (immunoglobulin class G [IgG]). Unlike the previous product, the investigational product is lyophilized. When properly reconstituted, VariZIG is approximately a 5% solution of IgG that can be administered intramuscularly.

#### **Indications for Use of Investigational VariZIG**

Patients without evidence of immunity to varicella (i.e., without a history of disease or age-appropriate vaccination) who are at high risk for severe disease or complications, who have been exposed to varicella, and from whom informed consent has been obtained, are eligible to receive the IND application product under an expanded access protocol. The patient groups recommended by ACIP to receive VariZIG include the following:

- Pregnant women
- Immunocompromised patients
- Neonates whose mothers have signs and symptoms of varicella around the time of delivery (i.e., 5 days before to 2 days after)
- Premature infants born at >28 weeks of gestation who are exposed during the neonatal period and whose mothers do not have evidence of immunity

- Premature infants born at <28 weeks of gestation or who weigh <1,000 g at birth and were exposed during the neonatal period, regardless of maternal history of varicella disease or vaccination

Varicella vaccine was recommended in 1999 for postexposure prophylaxis of other persons without evidence of varicella immunity and who have no contraindications to vaccination. The vaccine should be administered preferably within 96 hours and possibly up to 120 hours postexposure. If illness occurs, with or without postexposure vaccination, antiviral treatment (e.g., acyclovir) can be considered for adolescents and adults. A protocol under the IND has been approved by a Central IRB which allows use of VariZIG on a case by case basis using the Central IRB approval as long as your institution and local IRB allow that. Providers who identify a patient can call FFF Enterprises at (800) 843-7477 for the necessary forms. FFF will send VariZIG by next day air.

#### **From Your Colleagues**

##### **Judy Thierry, HQE**

#### **Achievements in public health: reduction in perinatal transmission of HIV infection**

Implementation of recommendations for universal prenatal HIV testing, anti-retroviral (ARV) prophylaxis, elective cesarean delivery, and avoidance of breastfeeding has resulted in a 95% decrease in the number of perinatal AIDS cases in the United States since 1992 and a decline in the risk for perinatal HIV transmission from an HIV-infected mother to less than 2%. However, barriers to the elimination of perinatal HIV infection remain, as the number of HIV infections continues to rise among women, and health-care services are not universally accessed by women in need of these services. Finally, the success in reducing perinatal HIV transmission observed in the United States contrasts with the situations in poorer countries, particularly in sub-Saharan Africa, where perinatal HIV transmission remains largely unabated. Continued success in the United States and reduction of perinatal HIV transmission in areas where such transmission remains common will require sustained commitment to prevention of HIV infection among women and to treatment for women affected by HIV/AIDS.

Achievements in Public Health: Reduction in Perinatal Transmission of HIV Infection — United States, 1985 – 2005. *MMWR*. June 2, 2006;55(21):592-597 [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5521a3.htm?s\\_cid=mm5521a3\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5521a3.htm?s_cid=mm5521a3_e)

### Editorial comment: George J. Gilson, MD

Since the first pediatric cases of HIV were reported in the early 80s, significant progress has occurred in the prevention of vertical transmission of the infection in the United States. Prior to the era of anti-retroviral (ARV) therapy, perinatal transmission was as high as 30%, but is currently under 2%. Nevertheless, transmission continues to occur, mostly to infants who are born to women who have had no prenatal care (16%), who have had prenatal care but who have not been tested (26%), or who had been recognized as infected but who had not been adequately treated (41% had not received zidovudine during labor). These are the areas where we should be able to make improvements in our care. Utilization of the “opt-out” approach to prenatal HIV screening, testing with the rapid, point of care, “OraQuick” test for women in labor with undocumented HIV status, and re-testing in the third trimester of high-risk women (history of a sexually transmitted infection or illicit drug use in the current pregnancy, or women from high prevalence areas), are all areas where the primary provider can play an important role in reducing transmission. Increased awareness among women of the need for testing, and case management to insure adequate prenatal care and adherence to ARV treatment for women identified as infected, are also crucial in preventing new infant infections. HIV infection in women is increasing rapidly, currently accounting for over a quarter of the total cases in the United States, and underscores the need for increased vigilance on the part of all of us who care for pregnant clients.



### Hot Topics: Obstetrics Incontinence not correlated with vaginal delivery

Incontinence is a common problem for postmenopausal women, but no difference in prevalence or severity could be demonstrated between parous and nulliparous sisters. Conversely, familial factors appear to be highly significant predictors of urinary incontinence. The authors suggest that the current focus on delivery in the etiology of incontinence is inappropriate and that research and preventive efforts be directed toward understanding familial factors.

*Conclusion:* Vaginal birth does not seem to be associated with urinary incontinence in postmenopausal women. Considering the high concordance in continence status between sister pairs, and considering that the majority of parous women are continent, an underlying familial predisposition toward the development of urinary incontinence may be present.

<i>Concordance of Continence Status Within Sister Pairs</i>			
<i>Incontinence in</i>	<i>Parous sister</i>		
<i>nulliparous sister</i>	<i>None (%)</i>	<i>present (%)</i>	<i>Total (%)</i>
None	47 (32.87)	28 (19.58)	75 (52.45)
Present	25 (17.48)	43 (30.07)	68 (47.55)
Total	72 (50.35)	71 (49.65)	143 (100.00)

*Note:* Seven sister pairs, in each of which one of the sisters had incontinence unrelated to stress or urge, were not included in this table.

*Adapted with permission from Buchsbaum GM, Duecy EE, Kerr LA, Huang LS, Guzick DS. Urinary incontinence in nulliparous women and their parous sisters. *Obstet Gynecol* 2005;106:1256.*

Buchsbaum GM, et al. Urinary incontinence in nulliparous women and their parous sisters. *Obstet Gynecol*. December 2005;106:1253-8.

### OB/GYN CCC Editorial comment Do we inject a bias toward cesarean delivery based on future incontinence?

This study will reframe the discussion into the current situation in which cesarean delivery is being advocated (and demanded by some patients) to prevent urinary incontinence later in life. Buchsbaum, et al have raised serious questions about the argument that there is a direct correlation between vaginal delivery and future incontinence.

According to Wu, et al, nearly two thirds of obstetricians support elective cesarean delivery for this reason. Combined with the current backlash against vaginal birth after cesarean delivery, the cesarean delivery rate seems set to spiral beyond the current 30 percent unless the debate can be refocused on scientific evidence of the net benefit for mothers.

Wu JM, Hundley AF, Visco AG. Elective primary cesarean delivery: attitudes of urogynecology and maternal-fetal medicine specialists. *Obstet Gynecol*. 2005;105:301-6.

## Gynecology

### **FDA licenses new vaccine for prevention of cervical cancer and other diseases in females caused by human papillomavirus**

The Food and Drug Administration (FDA) announced the approval of Gardasil, the first vaccine developed to prevent cervical cancer, precancerous genital lesions, and genital warts due to human papillomavirus (HPV) types 6, 11, 16 and 18. The vaccine is approved for use in females 9 - 26 years of age. Gardasil was evaluated and approved in six months under FDA's priority review process — a process for products with potential to provide significant health benefits. The vaccine is effective against HPV types 16 and 18, which cause approximately 70 percent of cervical cancers and against HPV types 6 and 11, which cause approximately 90 percent of genital warts.

Gardasil is a recombinant vaccine (contains no live virus) that is given as three injections over a six-month period. Immunization with Gardasil is expected to prevent most cases of cervical cancer due to HPV types included in the vaccine. However, females are not protected if they have been infected with that HPV type(s) prior to vaccination, indicating the importance of immunization before potential exposure to the virus. Also, Gardasil does not protect against less common HPV types not included in the vaccine; thus routine and regular pap screening remain critically important to detect precancerous changes in the cervix to allow treatment before cervical cancer develops.

The results showed that in women who had not already been infected, Gardasil was nearly 100 percent effective in preventing precancerous cervical lesions, precancerous vaginal and vulvar lesions, and genital warts caused by infection with the HPV types against which the vaccine is directed. The studies also evaluated whether the vaccine can protect women already infected with some HPV types included in the vaccine from developing diseases related to those viruses. The results show that the vaccine is only effective when given prior to infection. Two studies were also performed to measure the immune response to the vaccine among younger females aged 9 - 15 years. Their immune response was as good as that found in 16 - 26 year olds, indicating that the vaccine should have similar effectiveness when used in the 9 - 15 year age group. The safety of the vaccine was evaluated in approximately 11,000 individuals. Most adverse experiences in study participants who received Gardasil included mild or moderate local reactions, such as pain or tenderness at the site of injection.

### **OB/GYN CCC Editorial comment: Rapid approval marks major advancement in public health**

This is the biggest news in women's health since the advent of the pap smear. While FDA approval is very important, perhaps most important, programmatically, is when and how the Merck vaccine gets approved for roll out by the Advisory Committee on Immunization Practices (ACIP).

The ACIP meeting is due to occur in late June and it is

really there that more of the salient details will arise. Will it be indicated universally, or just for high risk groups? If universally, then it will qualify for the Vaccines For Children (VFC) program approval and be essentially free to AI/AN through the State Immunization program. If approved for high risk groups only, then it will be difficult to get broad acceptance, plus we would likely have to pay for it.

As this would be the third new vaccine for adolescents in as many years (approximately \$120 each times three doses), the HPV vaccine will run into some stiff competition for limited State Immunization funding with acellular DPTa and Menactra (meningitis). Typically ACIP rolls out new vaccines the first of the calendar year; hence January, 2007 is the most likely roll out at this point.

Each Indian health site needs to be mindful that this vaccine is limited to only two of the major cancer causing subtypes, i.e., 16 and 18. In Alaska Natives our rates of 16 and 18 are somewhat similar to the national statistics, but we actually had a very high rate of multiple infections, i.e., subtypes not covered by either the Merck or GSK vaccines. It is for that reason one probably needs to think along the lines of long term immunogenicity studies in your population to monitor its effect over time. Similar studies and similar programmatic follow-up were very helpful during the Hep B vaccine national roll out. In addition, the Merck vaccine has not been particularly well studied in minority patients to date.

This will be important because we need our patients with abnormal paps to become the local champions for this vaccine in their conversations with their adolescent daughters and sisters. Although we need to emphasize this is a 'cancer' vaccine, there still will be some questions about the effect of a possible sexually transmitted infection vaccine in a pre-pubescent girls with subsequent implications on sexual behavior. This is especially important to discuss soon due to the possible rollout in 5 - 6 months.

So, based on these and other issues, you may want to consider first maximizing patient education to facilitate the rollout (based on local focus group-developed materials), emphasizing the cancer prevention aspects of this vaccine and that this is not primarily an STI preventing vaccine. See Fact Sheet below

### **Human Papilloma Virus Vaccine Fact Sheet**

This fact sheet on human papilloma virus (HPV) vaccines provides questions and answers about HPV and HPV vaccines, which may be available soon. <http://www.cdc.gov/std/hpv/STDFact-HPV-Vaccine.htm>

### **Child Health Co-occurring maternal conditions and behavior problems in children**

Our study suggests that, by three years of age, there is already evidence of the effect of adverse childhood experiences, occurring in this study in the form of parental

mental health problems, substance use, and domestic violence. The authors found that the risk of behavior problems in three-year-olds increased with the number of categories — mental health, substance use, and domestic violence — in which the mother reported a condition in the year after delivery. They also noted that the graded increase in risk was independent of sociodemographic and prenatal factors, as well as measures of paternal mental health and substance use in the year after delivery.

The authors conclude that “to play their most useful role, health care providers might wish to consider the health and well-being of the family, the social unit involved in the transfer of health between generations, rather than limiting their focus to the individual patient or to a particular developmental period.”

Whitaker RC, Orzol SM, Kahn RS. Maternal mental health, substance use, and domestic violence in the year after delivery and subsequent behavior problems in children at age 3 years. *Archives of General Psychiatry*. 2006;63(5):551-560.

### Chronic Disease and Illness

#### Group visits: promising approach to chronic care management for the motivated patient

*Results:* Although the heterogeneity of the studies presented renders the assessment of this care model problematic, there are sufficient data to support the effectiveness of group visits in improving patient and physician satisfaction, quality of care, quality of life, and in decreasing emergency department and specialist visits.

*Conclusion:* Group visits are a promising approach to chronic care management for the motivated patient. Future research may benefit, however, from abandoning old nomenclatures and clearly defining the structure, processes of care, content of visits, and appropriate outcome measures.

Jaber R, et al. Group visits: a qualitative review of current research. *J Am Board Fam Med*. 2006 May-Jun;19(3):276-90.

### Features

#### ACOG

#### Use of Hormonal Contraception in Women With Coexisting Medical Conditions Practice Bulletin, No, 73

The following recommendations and conclusions are based on good and consistent scientific evidence (Level A):

- A history of benign breast disease or a positive family history of breast cancer should not be regarded as contraindications to oral contraceptive use.
- Combination oral contraceptives are safe for women with mild lupus who do not have antiphospholipid antibodies.
- Combination contraceptives are not recommended for women with a documented history of unexplained venous thromboembolism or venous thromboembolism associated with pregnancy or exogenous estrogen use, unless they are taking anticoagulants.

- Combination oral contraceptives should be prescribed with caution, if ever, to women who are older than 35 years and are smokers.
- Use of the levonorgestrel intrauterine system is appropriate for women with diabetes without retinopathy, nephropathy, or other vascular complications.

The following recommendations and conclusions are based on limited or inconsistent scientific evidence (Level B):

- Healthy, nonsmoking women doing well on a combination contraceptive can continue their method until the ages of 50 – 55 years, after weighing the risks and benefits.
- Progestin-only oral contraceptives and DMPA can be initiated safely at six weeks postpartum in lactating women and immediately postpartum in nonbreastfeeding women.
- Combination contraceptives are not recommended as the first choice for breastfeeding women because of the possible negative impact of contraceptive doses of estrogen on lactation. However, use of combination contraceptives by well-nourished breastfeeding women does not appear to result in infant development problems; therefore, their use can be considered once milk flow is well established.
- Women with well-controlled and monitored hypertension who are aged 35 years or younger are appropriate candidates for a trial of combination contraceptives, provided they are otherwise healthy, show no evidence of end-organ vascular disease, and do not smoke.
- The use of combination contraceptives by women with diabetes should be limited to such women who do not smoke, are younger than 35 years, and are otherwise healthy with no evidence of hypertension, nephropathy, retinopathy, or other vascular disease.
- The use of combination contraceptives may be considered for women with migraine headaches if they do not have focal neurologic signs, do not smoke, are otherwise healthy, and are younger than 35 years. Although cerebrovascular events rarely occur among women with migraines who use combination oral contraceptives, the impact of a stroke is so devastating that clinicians should consider the use of progestin-only, intrauterine, or barrier contraceptives in this setting.
- Because of the increased risk of venous thrombotic embolism, combination contraceptives should be used with caution in women older than 35 years who are obese.
- In women with depressive disorders, symptoms do not appear to worsen with use of hormonal methods of contraception.
- If oral contraceptives are continued before major surgery, heparin prophylaxis should be considered.

The following recommendations and conclusions are based primarily on consensus and expert opinion (Level C):

- Most women with controlled dyslipidemia can use combination oral contraceptives formulated with 35 mcg or less of estrogen. In women with uncontrolled LDL cholesterol greater than 160 mg/dL, a triglyceride level greater than 250 mg/dL, or multiple additional risk factors for coronary artery disease, alternative contraceptives should be considered.
- Depot medroxyprogesterone acetate has noncontraceptive benefits and is appropriate for women with sickle cell disease.
- Progestin-only contraceptives may be appropriate for women with coronary artery disease, congestive heart failure, or cerebrovascular disease. However, combination contraceptives are contraindicated in these women.
- Short- or long-term use of DMPA in healthy women should not be considered an indication for DXA or other tests that assess bone mineral density. In adolescents, the advantages of DMPA likely outweigh the theoretical safety concerns regarding bone mineral density and fractures. However, in the absence of long-term data in this population, consideration of long-term use should be individualized.

Use of hormonal contraception in women with coexisting medical conditions. ACOG Practice Bulletin No. 73. American College of Obstetricians and Gynecologists. *Obstet Gynecol.* 2006;107:1453-72.

### **Breastfeeding: Suzan Murphy, PIMC Early breastfeeding choice, GDM, and BMI**

When a mother has diabetes during pregnancy, she has more to worry about. Among other diabetes related concerns, her baby has a greater risk for being large for gestational age and developing type 2 diabetes at an early age. Also, studies indicate that if are babies born large for gestational age, they are likely to stay overweight or obese as they grow.

There is hope that more children born to mothers with gestational diabetes mellitus (GDM) can avoid early childhood obesity and its risk of later adult obesity, and so possibly diabetes. A study by Schaefer-Graf, et al in Germany found that early feeding choice could change risk of overweight for children from mothers with GDM.

During 1995 - 2000, 2000 women with GDM were cared for at the Vivantes Medical Center in Berlin, Germany. Later, many returned for follow-up, including 354 children (54% males, 46% females) who were included in this study. The mean age was 5.4 + 1.6 years, 28.4% were overweight. Overweight prevalence by feeding choice was:

Children not breastfed	37.3%
Children breastfed up to 3 months	32.5%
Children breastfed more than 3 months	22.0%

The impact of breastfeeding as a preventive measure was maintained after adjusting for confounding factors such as parental obesity and high birth weight. The authors concluded that “the risk of childhood overweight may be reduced by 40 - 50% when breastfeeding is for more than three months.”

For more information about this study, please see the complete article by Schaefer-Graf UM, et al, Association of breast-feeding and early childhood overweight in children from mothers with gestational diabetes mellitus, *Diabetes Care.* May 2006;29(5):1105-1007.

### **Family Planning Refusals by pharmacists to dispense emergency contraception: a critique**

Over the past several months, numerous instances have been reported in the US media of pharmacists refusing to fill prescriptions written for emergency postcoital contraceptives. These pharmacists have asserted a “professional right of conscience” not to participate in what they interpret as an immoral act. In this commentary, we examine this assertion and conclude that it is not justifiable, for the following reasons: 1) postcoital contraception does not interfere with an implanted pregnancy and, therefore, does not cause an abortion; 2) because pharmacists do not control the therapeutic decision to prescribe medication but only exercise supervisory control over its dispensation, they do not possess the “professional right” to refuse to fill a legitimate prescription; 3) even if one were to grant pharmacists the “professional right” not to dispense prescriptions based on their own personal values and opinions, pharmacists “at the counter” lack the fundamental prerequisites necessary for making clinically sound ethical decisions; that is, they do not have access to the patient’s complete medical background or the patient’s own ethical preferences, have not discussed relevant quality-of-life issues with the patient, and do not understand the context in which the patient’s clinical problem is occurring. We conclude that a policy that allows pharmacists to dispense or not dispense medications to patients on the basis of their personal values and opinions is inimical to the public welfare and should not be permitted.

Wall LL, Brown D. Refusals by pharmacists to dispense emergency contraception: a critique. *Obstet Gynecol.* 2006 May;107(5):1148-51.

### **Medical Mystery Tour Copious postoperative mucous secretions**

A 60 year old female presented to her primary care provider with lower abdominal discomfort. The patient did not complain of increasing weight or abdominal girth, and noted no change in her appetite. The patient was s/p vaginal hysterectomy for a history of irregular bleeding with normal pap smears. Imaging studies revealed a complex cystic pelvic mass with no evidence of ascites. Other medical issues included hypertension controlled on oral medication, and a one

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pack a day history of tobacco smoking with no current respiratory symptoms. The patient was well nourished and had no previous history of abdominal surgery.

The patient underwent a staging laparotomy that revealed bilateral hydrosalpinges, and was otherwise without complications. On post op day one, the patient was afebrile and tolerated an advancing diet, but had coarse breath sounds. On the second day post-op the patient developed increased mucous production and had periods of desaturation. Examination revealed rhonchi and continued coarse breath sounds. Chest X-ray revealed complete opacification of the left hemithorax. The patient was transferred to the intensive care unit and received an urgent bronchoscopy, and was found to have tenacious mucous plugging. Her left lung was easily reinflated. The patient rapidly improved and was returned to the medical-surgical ward the following day. The patient continued to produce copious mucous secretions, and she received vigorous pulmonary toilet with bronchodilators and incentive spirometry.

On the day the following the bronchoscopy the patient was noted to have several small fatty spots between her midline staples, but she was otherwise tolerating an advancing diet, voiding, and had bowel movements. It was felt the prolapsed subcutaneous fat was a result of the patient's coughing due to the copious secretions. On the fourth postoperative day, there was no wound discharge. In fact the subcutaneous fat was becoming dehydrated so moist gauze was placed on the wound to facilitate replacement of the slightly prolapsed subcutaneous fat the next day. The patient was prepared for discharge on the fifth post-operative day and it was elected to remove the staples, replace the slightly prolapsed subcutaneous fat and then place steristrips over the otherwise clean and dry incision. In anticipation of discharge the patient was encouraged to stop smoking, and the nature of chronic obstructive pulmonary was discussed with the patient.

Can you think of any further discharge or wound care instructions you would give this patient? Stay tuned to next month's CCCC Newsletter for the rest of the story.

### **Midwives Corner: Lisa Allee, CNM Empowering women to find the power of birth is of great value**

This study by Jan Riordan and colleagues is unique in that they had a true control group of women who delivered without any pain medication. Previous studies had compared groups of women with different types of medications. They also used a tool to assess breastfeeding specifically, whereas other studies used tools that assessed general neonatal behaviors. The study was prospective, multisite, and involved 129 mother-baby dyads with vaginal births at term, 29% of which occurred after unmedicated labors and 71% had some form of pain medication. The results showed significant differences in breastfeeding ability between the non-medicated group and those receiving pain medications. The babies who were not

exposed to any pain medication had significantly higher scores, meaning more vigorous and effective suckling, than the other three groups. The IV-analgesia-only group and the epidural-only group had similar scores, significantly lower than the non-med group, and the IV plus epidural group had the lowest scores. The results did not show a difference in duration of breastfeeding, but the dyads with low scores weaned earlier than those with medium or high scores.

The authors conclude that pain medication during labor, including epidurals (and I think we can easily extrapolate to intrathecal) clearly hinder breastfeeding. They make the following points for consideration in clinical care:

- Nonpharmacological comfort measures are effective and do not compromise early neonatal suckling and breastfeeding.
- Informed consent includes telling women that their infant's ability to breastfeed is diminished with IV analgesics and epidurals (intrathecal).
- If epidurals (intrathecal) are used, it appears the best choice is medication that does not include a narcotic.
- Breastfeeding mothers who have had pain medication during labor may become discouraged, and babies with poor breastfeeding behaviors are at greater risk for dehydration, jaundice, and poor weight gain.

Riordan J, Gross A, Angeron J, Krumwiede B, Melin J. The effect of labor pain relief medication on neonatal suckling and breastfeeding duration. *Journal of Human Lactation*. 2000;16(1):7-12.

### **Midwives Corner Editorial comment: Lisa Allee, CNM**

I find this article to be yet another affirmation that empowering women to find the power of birth is of great value. When we teach, support, encourage, cajole, advocate, and do whatever else is necessary to assist women through the intense, life-altering experience of labor and birth without using narcotics, there are profound benefits for the woman, the baby, and, with this article, society when you consider the far-reaching effects of breastfeeding success. This article also points out that when women do use narcotics during labor, we must be very attentive to breastfeeding support initially and ongoing.

### **Navajo News: Kathleen Harner, Chinle Methamphetamine abuse among women on Navajo (Part 3 of 4)**

Phoenix Indian Medical Center (PIMC) has developed a program designed specifically for the special needs of substance abusers and women with mental health disorders. Their goal was to protect the unborn from toxic drug exposure, assist the mother in successfully abstaining from drugs and alcohol, and prevent repeat pregnancies with drug affected newborns. Beginning in October 2003, the midwives at PIMC staff a "Special Care Clinic" devoted to pregnant drug users, victims of domestic violence, and women with mental health

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disorders. The clinic meets one afternoon a week and has longer appointments than the normal prenatal care visits. Social workers and substance abuse counselors are in the clinic and available for same time appointments. At the first prenatal care visit, problems are identified, a routine prenatal workup is done, and sexually transmitted disease (STD) testing is performed. If substance abuse is identified, it is discussed thoroughly; a drug contract is created and the patient is asked to sign it. A urine drug screen (UDS) is obtained if the patient agrees.

PIMC has created a wide network of referrals for the women in their "Special Care Clinic." These include mental health, public health nursing, home health, case management and some community support groups (e.g., twelve step programs). Social services and substance abuse counseling are as accessible as possible because they are in the clinic with the midwives. The patient sees the same counselor and midwife at each visit whenever practical. The patient need never explain the purpose of her visit to the admitting clerk, which avoids embarrassment. A UDS is obtained at each visit if the patient has agreed, and the drug contract is signed at each visit as well. Patients are seen weekly if needed and otherwise are on a routine prenatal care schedule.

Patients receive gifts and incentives for participating in the "Special Care Clinic." At each visit the pregnant woman is given a gift for herself and her baby. These gifts include make-up, hair care products, inexpensive jewelry, and lotions for the mother. Baby gifts are blankets, clothing, pacifiers, and baby picture frames. Patients seem to particularly like the "Fetus Models" of a 12-week fetus. When a patient has had three negative UDS in a row she is rewarded with a \$15 gift certificate for Wal-Mart, Target, or Food City. If she tests positive for drugs there is no punitive action, but she is usually seen more frequently.

If a patient is abusing methamphetamine (MA) heavily, residential treatment is offered. If she is positive for drugs, in addition to her weekly visit with the midwife and mental health counselor, she also sees the social worker two or more times a week. Once several drug screens have been negative, she may be seen on a weekly schedule.

As of January 15, 2005 the program had been operating for 15 months. Over ninety women participated with a total of 275 midwife visits. Their diagnoses included substance abuse, anxiety/depressive disorders, bipolar disease, homelessness, severe congenital anomalies incompatible with life, and domestic violence. While some patients are still lost to follow up, many are drug free or have only occasional lapses. The midwives and patients are happy with the program. At PIMC every success is celebrated.

The PIMC program uses contingency management very effectively. Contingency management (CM) is based on a simple behavioral principle: if a behavior is reinforced or rewarded, it is more likely to occur in the future. Reinforcement of good behaviors such as negative urine screens and attending prenatal or therapy appointments

encourage women to stay abstinent. Rewards need not be large to be effective.

Cognitive behavioral therapy (CBT) has been widely used for treating cocaine abusers. CBT attempts to help patients recognize, avoid, and cope with problematic behaviors associated with substance abuse. It has many advantages over other more traditional therapies such as twelve step programs or traditional psychotherapy. It is a short term therapy that creates skills the patient can use after therapy is over. It has been studied extensively in clinical trials and has been proven very effective. It is flexible and can be individualized and is compatible with other treatments.

MA abuse among women of childbearing age is a complicated problem. Using a multifaceted and multidisciplinary approach to helping pregnant women stop abusing MA provides the best opportunity for success.

Next Month: The 'drop in' methamphetamine abusing gravida.

## References

Hunter, F. What we did about prenatal substance abuse special care clinic. A Power Point presentation. 2005.

*Oklahoma Perspective: Gregory Woitte, Hastings Indian Medical Center*

*Elective Cesarean Delivery*

When asked the question in your office about an elective primary cesarean delivery, how do you respond? Do you defer to the patient's right to determine her birthing method, or do you respond that you don't perform one without an indication? As the media popularizes elective cesareans for the famous, where do we stand as a profession? The NIH convened a consensus conference March 27 - 29 to review the available evidence.

The following is a summary of their conclusions. Cesarean deliveries without medical or obstetrical indications are on the rise and a component of this is due to elective maternal request. There is insufficient evidence to evaluate fully the benefits and risks of cesarean delivery on maternal request as compared to planned vaginal delivery, and more research is needed.

Until quality evidence becomes available, any decision to perform a cesarean delivery on maternal request should be carefully individualized and consistent with ethical principles. Given that the risks of placenta previa and accreta rise with each cesarean delivery, cesarean delivery on maternal request is not recommended for women desiring several children.

Cesarean delivery on maternal request should not be performed prior to 39 weeks of gestation or without verification of lung maturity, because of the significant danger of neonatal respiratory complications. Maternal request for cesarean delivery should not be motivated by unavailability of effective pain management. Efforts must be made to assure availability of pain management services for all women. The

NIH or another appropriate Federal agency should establish and maintain a website to provide up-to-date information on the benefits and risks of all modes of delivery.

**Perinatology Picks: George Gilson, MFM, ANMC**  
**Cesarean delivery rate: continues to increase without improving population outcomes**

Attempts to define, or enforce, an “ideal” cesarean delivery rate are futile, and should be abandoned. The cesarean rate is a consequence of individual, value-laden clinical decisions, and is not amenable to the methods of evidence-based medicine. The influence of academic authority figures on the cesarean rate in the US is placed in historic context. Like other population health indices, the cesarean deliver rate is an indirect result of American public policy during the last century. Without major changes in the way health and maternity care are delivered in the US, the rate will continue to increase without improving population outcomes.

An RCT requires a hypothesis that is testable in the real world; it should be simple, specific, and stated in advance. On those grounds, there is no direct way to test the hypothesis that there is an ideal cesarean delivery rate. Because the cesarean rate is calculated post-hoc, it is also impossible to design a prospective trial comparing specific cesarean rates. Conceptually, one might set up a large RCT with multiple arms, each having a different proportion of women by intended method of delivery, e.g., 100% elective cesarean versus 0% planned vaginal birth, 80/20, 50/50, etc. For specified outcome variables, an ideal cesarean rate could then be estimated retrospectively. It is clear that the ideal rate will depend on which women are studied, and how much weight is given to maternal versus fetal morbidity — all subjective criteria.

Cyr RM. Myth of the ideal cesarean section rate: commentary and historic perspective. *Am J Obstet Gynecol*. 2006 Apr;194(4):932-6.

**OB/GYN CCC Editorial comment**

**Patient-choice vaginal delivery? (See also the Oklahoma Perspective)**

As Dr. Gilson points out, the rapidly increasing cesarean rate does not improve commonly measured patient outcomes. Zweifler, et al confirm that trend in this 1996 through 2002 California study of the Birth Statistical Master Files, used to identify 386,232 California residents who previously gave birth by cesarean delivery and had a singleton birth planned in a California hospital. (Results below)

Here is an excerpt from a Reflection by Dr. Larry Leeman and Dr. Lauren Plante from the May/June Annals of Family Medicine.

“Patient-choice cesarean delivery is increasing in the United States. The American College of Obstetricians and Gynecologists supports this option, citing ethical premises of autonomy and informed consent, despite a lack of evidence for its safety. This increase in patient-choice cesarean delivery

occurs during a time when women with a breech-presenting fetus or a previous cesarean delivery have fewer choices as to vaginal birth. Patient-choice cesarean delivery may become widely disseminated before the potential risks to women and their children have been well analyzed. The growing pressure for cesarean delivery in the absence of a medical indication may ultimately result in a decrease of women’s childbirth options. Advocacy of patient choice requires preserving vaginal birth options as well as cesarean delivery.”

Leeman LM, Plante LA. Patient-choice vaginal delivery? *Ann Fam Med*. 2006 May-Jun;4(3):265-8.

*Primary Care Discussion Forum*

*September 2006: Palliative medicine’s role in the continuity of care*

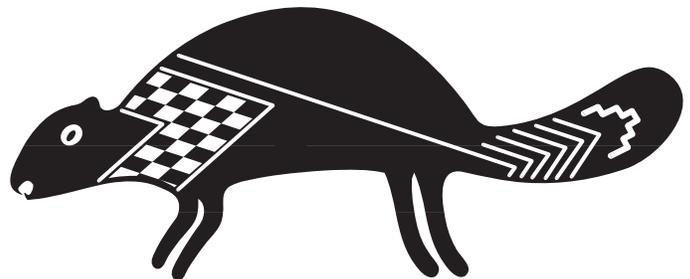
Moderator: Tim Domer, MD

- Management of acute vs chronic pain
- Quality of life in chronic illness
- The meaning of “code status”
- Preparing for a “good death”
- End-of-life care as part of continuity of care and prevention

**STD Corner: Lori de Ravello, National IHS STD Program**  
**HIV testing and additional analysis of national survey on HIV/AIDS**

The reported plans of the Centers for Disease Control and Prevention (CDC) to recommend routine HIV testing for patients in health care settings will mark a major change in the way HIV testing is conducted in the United States and is intended to increase testing nationwide. Given that an estimated one in four of the more than one million people living with HIV/AIDS in the US do not know they are infected, increased testing could help more people learn they are HIV positive, linking them to necessary care and services and leading to reduced risk behaviors. In order to help inform discussions about expanded testing, the Kaiser Family Foundation is releasing additional data from its “2006 Survey of Americans on HIV/AIDS.”

These two new reports are based on subsets of the full survey. Go to <http://www.kff.org/kaiserpolls/pomr050806pkg.cfm>.



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# New on Your Library Website

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*Diane Cooper, Biomedical Librarian/Informationist, Health Services Research Library, National Institutes of Health Library, Bethesda, Maryland*

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## Daily Health Policy News Summaries

You might notice something different when you go to your HSR Library website. Headlines now appear at the top of the Features Panel. Click on the headline links and you will go to news summaries on the latest in women's health policy, health policy in general, and HIV/AIDS news. These summaries provide further links to the actual full-text articles and papers on the subject.

These news summaries are called the *Kaiser Daily Health Reports*, and are written and published by a for-profit organization, The Advisory Board Company, for the Henry J. Kaiser Family Foundation. The Reports are free, and we have a trial subscription. Take a look and give us some feedback about whether or not this service is useful to you.

## Filter Preferences in PubMed

When you conduct a literature search in PubMed, you can use LIMITS to limit your subject search to humans, English language only, publication years, age groups, and other limits. After you enter GO, your retrieval page will now show two default tabs above the results, "All" and "Review." The "All" tab includes all citations found on the subject you typed into the search box; the "Review" tab will show you only those citations in the "All" group that are review articles.

What's new is this: now you can group your search results further by areas of interest using **Filter Preferences**. To get to the **Filter Preference** page, click on the tiny hammer/wrench icon located next to the "Review" tab. You will now be in *My NCBI* (formerly "My Cubby"), where you will need to log in using your user name and password. If you haven't registered, you will need to create your user name and password. On the **Filter Preference** page, you can click on Browse to further select areas of interest. For example in the *Properties Group* under Clinical Queries you may select "diagnosis" or "therapy" among many possibilities. Another example in the *Properties Group*, under the category Health Services Research Queries is "Outcomes Assessment."

Here's an example. Let's look for articles on vitamin D and diet using the "Outcomes Assessment" filter. When you hit Go, your search retrieval will now show three tabs: "All" tab; "Review" tab; and "Outcomes Assessment" tab.

*Tip:* If you want to see citations that fit two or more categories (e.g., aged and outcomes assessment), use LIMIT to select "aged" and then go on to the **Filter Preference** page and select the filter "Outcomes Assessment." Using the LIMIT selection for "aged" will guarantee that the citations in the "Outcomes Assessment" tab are only "aged." On the other hand, if you were to select "aged" in the **Filter Preference** page, then you would see "aged" as a tab and all articles keyworded to "aged" are in this group of search results. Under the "Outcomes Assessment" tab will be "aged" and "not aged" in the citations.

*Another Tip:* Through the magic of cookies and central memory, your tab selections will stay with you for your next search. You can always delete a tab selection by checking on "My Selections."

If you need help using this feature or any of the electronic resources available to you through the HSR Library, please e-mail me at [cooperd@mail.nih.gov](mailto:cooperd@mail.nih.gov).



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This 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 and Alaska 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](mailto:sholve@tcimc.ihs.gov).

## IHS Child Health Notes

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### Quote of the month

“Knowledge is power”

Francis Bacon

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### This Is Important

Free access to full-text articles of the world’s medical literature is available to all Indian Health Service providers at federal/tribal/urban programs via the Health Services Research (HSR) Library, a branch of the National Institutes of Health (NIH) library.

Recognizing the rural location of most clinics that serve American Indian and Alaska Natives (AI/AN), the Indian Health Service has arranged access to the HSR Library. This service will allow you to conduct literature searches and to immediately download full text articles at no cost. Document delivery is also available for journal articles and books that are not in the online collection.

If you work at a federal site and are on the Wide Area Network (WAN) you can access this service at <http://hsrl.nihlibrary.nih.gov>. You can search by specific journal or use the *Pubmed* search engine via the National Institutes of Health.

For those at tribal or urban sites that are not on the WAN you can use this address: <http://nihlibrary.ors.nih.gov/ezproxy/ihs.htm>. This address can be used at the workplace or at home using an ID and password. To obtain an ID and password, contact Diane Cooper at [cooperd@mail.nih.gov](mailto:cooperd@mail.nih.gov). She can also help you with your literature searches or help you use the electronic resources that are available through the online library.

Her contact information is as follows:

Diane Cooper, MSLS  
Informationist for the Indian Health Service  
National Institutes of Health (NIH) Library  
[cooperd@mail.nih.gov](mailto:cooperd@mail.nih.gov)  
(301) 594-2449

### Articles of Interest

Antipyretic treatment in young children with fever: acetaminophen, ibuprofen, or both alternating in a randomized, double-blind study. *Arch Pediatr Adolesc Med.* 2006 Feb;160(2):197-202. <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?CMD=search&DB=pubmed>

Acetaminophen and ibuprofen have each demonstrated efficacy and safety in reducing fever in children. This study confirms what many practitioners have been doing for years; it

is safe and effective to alternate acetaminophen and ibuprofen for maximal reduction in pain and fever.

### Infectious Disease Updates Rosalyn Singleton, MD, MPH

Human Papillomavirus (HPV) is the most common sexually transmitted infection, and can cause cervical cancer in women. American Indian and Alaska Native (AI/AN) women in several regions experience cervical cancer rates that are higher than other U.S. women. Although Pap smears and colposcopy have reduced the rate of invasive cancer, pre-cancerous lesions remain common, and their diagnosis and treatment require substantial resources.

One of two investigational HPV vaccines, Gardasil™ (Merck) was licensed on June 8, 2006 for use in females aged 9 - 26 years. In clinical studies, Gardasil™ had 100% efficacy in preventing infection from serotypes 16, 18, 6, and 11. Types 16 and 18 are responsible for 70% of cervical cancer and types 6 and 11 are responsible for 90% of genital warts. The Advisory Committee on Immunization Practices (ACIP) will vote on recommendations for this vaccine on June 29, 2006. The proposed recommendations are to provide routine vaccination for 11 - 12 year-old girls and catch-up vaccination for 13 - 26 year-old females. For more information about the proposed ACIP recommendations and the upcoming ACIP meeting, visit [www.cdc.gov/nip/acip](http://www.cdc.gov/nip/acip). ACIP will also vote on whether to include this vaccine in the Vaccines for Children (VFC) Program. The retail price of the vaccine is \$120 per dose (\$360 for full series), so we hope this vaccine will be covered under the VFC Program. More information on HPV and the vaccine can be found at <http://www.cdc.gov/std/hpv/STDFact-HPV-vaccine.htm>.

There are several questions about HPV vaccine of interest to AI/AN people, and CDC and tribal groups are planning on-going research to address them. Among the many issues being looked at are determining the questions people have about this vaccine and the best way to educate them, and questions regarding the distribution of cancer-causing HPV serotypes in AI/AN populations and the efficacy of the current HPV vaccine for AI/AN populations.

### Recent literature on American Indian/Alaska Native Health

#### Doug Esposito, MD

American Indian adolescents in substance abuse treatment: Diagnostic status. *J Subst Abuse Treat.* 2006

Jun;30(4):275-84. [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=16716841&query\\_hl=5&itool=pubmed\\_DocSum](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=16716841&query_hl=5&itool=pubmed_DocSum)

This study describes the prevalence of DSM-IV mental disorders among American Indian (AI) adolescents admitted to a Residential Substance Abuse Treatment Program (RSATP). It is the first such study combining DSM-IV diagnoses obtained through comprehensive structured interviews in AI adolescent RSATP patients. Results are compared with school based studies of AI adolescents in addition to similar studies of non-AI adolescents in substance abuse treatment settings.

The authors enrolled 89 AI patients between the ages of 13 and 18 years admitted to a RSATP in the southeastern United States. The 89 study subjects represented 27 different tribes. Data were collected from a combination of comprehensive structured diagnostic interviews using two validated instruments (DISC-IV-Y and CIDI-SAM) and review of treatment records.

As expected, substance use and substance use disorder rates were high. A mean of 5.26 substances were used by the aggregate group of study subjects in the year prior to interview. Marijuana was most commonly used (100%), followed by alcohol (96.6%), stimulants (57.3%), and cocaine (50.6%). In terms of substance use disorder, past year marijuana abuse/dependence prevalence was the highest (84.3%), followed by alcohol abuse/dependence (67.4%), stimulant abuse/dependence (22.5%), and cocaine abuse/dependence (15.7%). In fact, 20.4% of study subjects were found to have four or more substance use disorders. Due in part to limited sample size, the only statistically significant gender difference in substance use disorder was hallucinogens, with a rate in males of 16.7 % and females 0%. No gender difference was found for number of substances used.

Notably, 5.6% of study participants (five individuals) did not meet diagnostic criteria for any substance use disorder. This is despite their being admitted to a RSATP. The authors offer a detailed and interesting discussion of several plausible explanations for this finding. It's worth taking a look.

Criteria for at least one DSM-IV non-substance mental disorder were met in 82% of study subjects. Twenty seven percent met criteria for two or more such disorders. The most commonly identified non-substance disorder was conduct disorder (CD) at 72.4%. Males were more likely to meet criteria for CD than female subjects (83.3% vs. 60.0%). This was the only statistically significant gender difference for non-substance mental disorders identified. Other disorders uncovered were ADHD (18%), major depressive disorder (14.6%), post traumatic stress disorder (10.1%), oppositional defiant disorder (3.4%), and generalized anxiety disorder (2.2%). These rates are high, but not surprising when compared to studies conducted in non-AI RSATP patients.

Findings from this study contrast studies of non-AI adolescents in one important way. AI adolescent RSATP patients appear to have higher relative rates of marijuana use and abuse/dependence as compared to alcohol. The opposite is

true for non-AI RSATP patients, where alcohol use and abuse/dependence rates are found to be highest. Referral bias is a plausible confounder; however, marijuana and alcohol use patterns reported in this study parallel patterns found in school-based studies of substance use.

The authors caution that careful interpretation of their findings is warranted. Limitations of their data are in part due to small sample size and study of a single treatment setting. Their results require replication and further validation. Other important limitations are described in detail in the paper.

Finally, treatment strategies that have been developed for substance abusing non-AI adolescents in RSATPs might be of value to similarly situated AI adolescents. Careful and thoughtful scrutiny of these strategies, with thorough consideration of their cultural relevance and their feasibility, given current resource limitations, is suggested.

### Editorial Comment

The National Center for American Indian and Alaska Native Mental Health Research, University of Colorado Health Sciences Center, which is where the authors of this study work, is in Aurora, Colorado. The authors and the Center are prolific in the study of mental health-related issues among AI/AN populations. They are also highly skilled and experienced in the delivery of mental and behavioral health services to this same population. Take a look at the Center's website ([http://www.uchsc.edu/ai/ncaianmhr/ncaianmhr\\_index.htm](http://www.uchsc.edu/ai/ncaianmhr/ncaianmhr_index.htm)). They have a lot of interesting and exciting activities going on.

### Announcements from the AAP Indian Health Special Interest Group

#### Sunnah Kim, MS

*2006 Native American Child Health Advocacy Award Recipient*

Each year, the AAP Committee on Native American Child Health presents the Native American Child Health Advocacy Award to recognize an individual who has made a major contribution to Native American child health.

The recipient of the 2006 award is Dr. Bill Green, former chairperson of the Indian Health Special Interest Group. Dr. Green was nominated by Dr. Kelly Moore, who stated, "Dr. Green has displayed exceptional leadership on behalf of Native American children through his distinguished service as Chief Clinical Consultant in Pediatrics for the Indian Health Service from 1996 to 2002. Dr. Green remains widely recognized by his peers as one of the nation's leading experts and advocates for Native American child health." The award will be presented during the 2006 AAP National Conference and Exhibition on October 8, 2007 in Atlanta, Georgia. Please join us in extending our congratulations to Dr Green!

### International Meeting on Indigenous Child Health: Call for Presentations

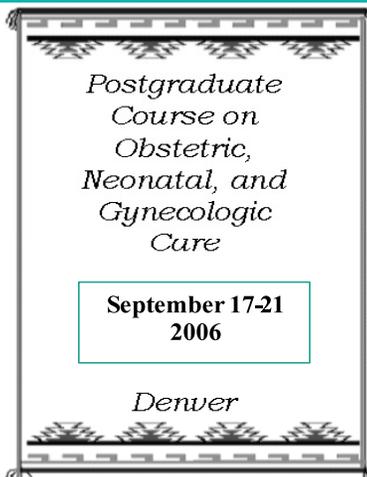
Join the American Academy of Pediatrics and the Canadian Paediatric Society, in cooperation with the Indian Health Service and the First Nations and Inuit Health Branch, Health Canada, for the International Meeting on Indigenous Child Health, which

will be held April 20 - 22, 2007 in Montreal, Quebec. This will be an opportunity for child health providers and researchers dedicated to working with American Indian, Alaska Native, First Nations, Inuit, and Métis children and families to join together and share their experiences and successes in providing health care to indigenous children and their families.

The theme of this conference is "Solutions, Not Problems," and the goal will be to have much of the conference's educational program focused on model programs, research in indigenous communities, and skills-building. A call for presentations has been released and is designed to discover the innovative programs that have been implemented

and found to be successful at improving the health of indigenous children in the US or Canada. Proposal submissions will be accepted from any individual working with indigenous children and youth, and is not limited to medical providers. The call for presentations can be found at <http://www.aap.org/nach/2InternationalMeeting.htm>.

Please note that IHS employees will need to obtain a federal passport in order to receive reimbursement for attending the international meeting due to the Canadian location. For more information on passport requirements and for updated conference information, visit [www.aap.org/nach](http://www.aap.org/nach).



**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 17 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 available on a first come first serve basis. **Register now!** Send your completed registration form to Vonne Malloy, ACOG, 409 12<sup>th</sup> Street SW Washington, DC 20024 (phone: 202-863-2580; fax: 202-484-3917).

**POSTGRADUATE COURSE ON OBSTETRIC, NEONATAL, AND GYNECOLOGIC CARE**

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**Please register me for the postgraduate course to be held September 17-21, 2006. I have checked the appropriate registration boxes below:**

- IHS employee:  Physician \$450
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- Other health professional \$225  Please enroll me in the NRP course for an additional fee of \$50.
- Non-IHS employee:\*

\* 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.



## Change of Address or Request for New Subscription Form

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### 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@phx.ihs.gov](mailto:the.provider@phx.ihs.gov). Previous issues of THE PROVIDER (beginning with the December 1994 issue) can be found on the CSC Internet home page ([www.ihs.gov/PublicInfo/Publications/HealthProvider.asp](http://www.ihs.gov/PublicInfo/Publications/HealthProvider.asp)).

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**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](http://www.csc.ihs.gov).

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