



# THE IHS PRIMARY CARE PROVIDER



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## Working Together to Combat Meth in Indian Country

*Dr. Charles W. Grim, Director, Indian Health Service,  
Rockville, Maryland*

The rapidly growing problem of methamphetamines, or meth, in Indian Country is receiving widespread attention by professionals in the fields of health, behavioral health, social services, and law enforcement. In this first of two special issues of the *IHS Primary Care Provider*, you will learn more about the unique challenges meth poses to our American Indian and Alaska Native communities. In part two, we will identify promising practices to address meth addiction.

As you know, one of my three Director's Initiatives is Behavioral Health, and the reduction of meth abuse is a core focus of this initiative. But meth cannot be addressed through behavioral health efforts alone; the response must be a collaborative and cohesive one that includes the two other Director's Initiatives, which are Health Promotion/Disease Prevention and Chronic Disease Management. Meth affects not only the user, but also his or her family, community, and environment. Children suffer, families are broken apart, futures are snuffed out, and homes and environments contaminated. Overtaxed health care, social services, law enforcement, judicial, and substance treatment programs are further compromised. The problems facing the community, just as with the individual, must be addressed holistically and in coordination with many other related issues.

Achieving wellness in mind, body, and spirit takes considerable dedication and teamwork. It is critical to have federal, tribal, urban Indian, and state public health agencies and organizations, as well as other public and private entities, working together as part of a continuum to address this issue. We are grateful to the Substance Abuse and Mental Health Services Administration and other caring and concerned agencies as well as experts from the public and private sectors, for their support in collaborating with IHS to address meth in Indian Country. By working together, we will confront this challenge in a strong and concerted way. Our united goal is to continue to maintain and improve the health and wellness of Indian people and communities through the next generations.

### Methamphetamine Abuse in Indian Country

We are seeing the scourge of methamphetamine spread across Indian Country at an accelerating rate. Lori De Ravello, MPH, CDC Assignee to the National STD Program, volunteered to coordinate two special issues of *The IHS Provider* dedicated to this problem. The focus of this month's series of articles is *defining the problem*. Watch for a follow-up issue devoted to *working together on solutions*. We wish to recognize Ms. De Ravello's initiative and hard work that made this possible.

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# Rural Methamphetamine Use: Implications for AI/AN Communities

Susan Dreisbach, PhD, Ben Hickler, MA, Stephen Koester, PhD, all from the University of Colorado at Denver and Health Sciences Center, Denver, Colorado

## Introduction

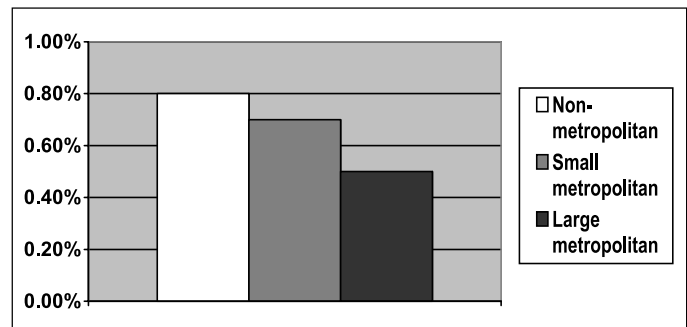
Headlines in the *Craig Daily Press*, *Great Falls Tribune*, and *Casper Star Tribune* join forces with those from the *New York Times* and National Public Radio to highlight the gravity of the methamphetamine (meth) problem in rural communities throughout the United States and, increasingly, throughout Indian Country. But media attention does little to help communities meet the challenges described in those headlines. To begin to address meth-related issues, communities, professionals, and individuals need a more thorough understanding of who uses methamphetamine, the reasons for use, the patterns and signs of use, the associated health risks, and the implications for prevention and treatment.

This report provides insight about these topics gained from in-depth interviews with 41 current and former adult methamphetamine users and 27 service providers from seven rural communities in Colorado. Although we learned a great deal about rural methamphetamine use and the potential for infection from Human Immunodeficiency Virus (HIV), hepatitis, and other sexually transmitted diseases (STDs), we learned even more fundamental lessons about its overwhelming and multi-faceted impact on rural communities and how critical it is that responses to methamphetamine abuse be comprehensive. Although this study was not specific for Native American communities, the lessons learned may be applicable in many respects.

## Trends in Rural Methamphetamine Use

Methamphetamine (meth) use intensified in the rural west and midwest in the early 1990s and gradually has invaded both the rural south and American Indian reservations.<sup>1,4</sup> In 2005, rural counties named meth the leading drug problem for counties except those in the Northeast.<sup>5</sup> Between 1992 and 2002, national drug treatment admissions for methamphetamine abuse increased fourfold from 10 to 52 per 100,000 people over age 12.<sup>6</sup> In Colorado, meth treatment rates in 2000 for some rural areas rivaled or exceeded those in urban areas.<sup>7</sup> Perhaps more importantly for Native American and other rural communities, national data show that the per capita rate of methamphetamine use is highest in non-metropolitan areas<sup>8</sup> (Figure 1).

Figure 1. 2004 rates of methamphetamine use in metropolitan vs non-metropolitan areas



Not only has methamphetamine use spread geographically with a concentration in rural areas, but it also has become increasingly available in rural areas. Any declines in local lab production have been countered by a substantial increase in highly pure and potent crystal meth imported from Mexico and distributed throughout the country in both urban and rural areas.<sup>9</sup> Of special concern are reports documenting efforts of sophisticated meth distribution organizations to target Indian Country.<sup>9,10</sup>

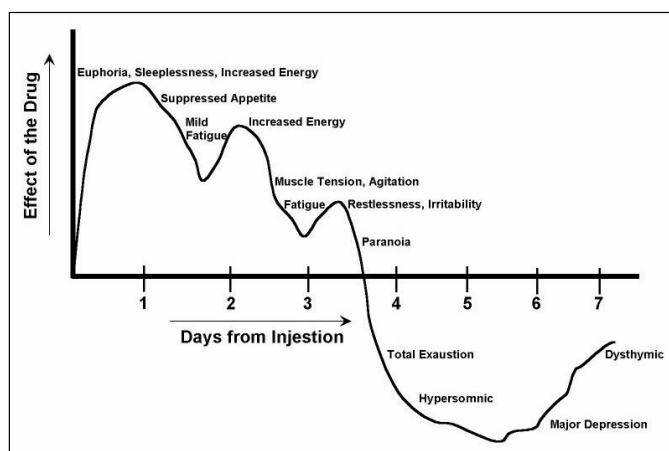
American Indian tribes and leaders are speaking out about the substantial and sudden impacts of methamphetamine at many levels of the community. Patrick Ragsdale, Bureau of Indian Affairs, talked passionately at a US Senate Hearing in April, 2006, about the fact that "...methamphetamine is destroying lives in Indian Country."<sup>11</sup> Like rural communities throughout Colorado, the Chippewa-Cree of Montana measure community impact by the increases in meth-related child welfare cases, which rapidly deplete local social services resources.<sup>12</sup> As one rural community spokesperson in Colorado explained, "Our entire child protection budget for the year was used by May for foster care because of it [meth]."<sup>13</sup> Increasingly, babies are being born with methamphetamine in their systems, such as the 63 babies born in 2004 within the San Carlos Apache tribe.<sup>14</sup> The Bureau of Indian Affairs has expressed concern that "methamphetamine is having a significant impact on the ability of youth to learn, stay in school, and graduate."<sup>11</sup> Understandably, limited rural resources have been directed toward reducing meth's devastating drain on law enforcement, treatment services, and child welfare resources<sup>13</sup> more than on reducing HIV, hepatitis, and sexually transmitted disease (STD) risks associated with methamphetamine that have been demonstrated in urban areas.<sup>15-18</sup>

## The Drug

This powerful stimulant, known on the street as “speed,” “crystal,” “glass,” “teena,” and “crank,” is easily produced from a common decongestant, ephedrine or pseudoephedrine, in combination with ordinary products such as iodine crystals, battery acid, red phosphorous, and anhydrous ammonia (a widely used liquid fertilizer). The drug, especially the meth “cooked” in local labs, may be a powder ranging in color from white or yellow to peanut butter brown or red. In contrast, the crystal meth supplied by Mexican drug organizations most often resembles glass shards or larger crystals and may be highly potent and pure.<sup>10</sup>

Methamphetamine acts on the nervous system to release a surge of dopamine, norepinephrine, and epinephrine. These neurochemicals, in turn, produce sensations of pleasure, self-confidence, energy, alertness, suppressed appetite, and for many, sensations of sexual arousal along with sexual stamina.<sup>19-21</sup> Unlike short-acting cocaine, methamphetamine remains active in the body for 8 - 12 hours and can be detected in the urine for up to 24 hours after ingestion.<sup>19</sup> Despite the long-lasting effects, users often ingest the drug more frequently to maintain the desired high over a long period of time<sup>1,13</sup> even though it is not physiologically possible to recapture the initial intense experience, regardless of the amount of drug ingested (Figure 2). When these neurochemicals become depleted from chronic use and/or bingeing, the user “crashes” into an extended deep sleep.<sup>1,13,19,20,22</sup> The crash is followed by severe psychological discomfort and symptoms of depression. Depression may be mild or debilitating but, in general, the symptoms are at least reduced following additional doses of meth, a situation which makes sobriety harder to maintain.<sup>1,13,23</sup>

**Figure 2. Behavioral response to repeated methamphetamine use during multi-day binge**



Source: Nick Taylor, PhD, Psychotherapist

In contrast to a therapeutic dose of 10 mg to 25 mg of methamphetamine hydrochloride or d-methamphetamine used to treat obesity or attention deficit and hyperactivity

disorder,<sup>1,24</sup> a typical single street dose of crystal meth would be ten to twenty times that amount, about 250 mg (1/4 gram). Chronic users may ingest as much as 1 - 3 grams in a 24-hour period.<sup>13, 22</sup> The cost of a single “hit” of meth varies by geographic region and supplier, but, in general, the range is \$20 - \$40 for 1/4 gram in the rural west with the cost per hit decreasing as volume increases. Common amounts of meth sold include a “teener” (1/16 ounce, 1 3/4 grams, or 7 hits) and an “eight-ball” (1/8 ounce, 3 3/4 grams, or 14 hits at about \$10 a hit).<sup>13</sup> The positive long-acting psychoactive properties of methamphetamine, combined with its relatively low cost and easy availability, make it an attractive drug for many populations.

## Patterns of Use

National data indicate that there are three primary user groups.<sup>3</sup> In urban settings, meth is a recreational drug for men who have sex with men. Increasingly, high school and college students are using meth for recreation and as a study aid.<sup>25</sup> In rural settings, meth use has been most prominent among young working class men and women ages 18 - 35. Increasingly, Latinos and AI/AN are being attracted to the drug in the rural west.<sup>3</sup>

Current and former rural users tell of being introduced to meth on the job site, by family, by friends, and for women, by sexual partners.<sup>13</sup> In rural communities, nearly equal numbers of men and women use methamphetamine, and users are still most often white working class young adults. A majority of users interviewed in rural Colorado say they have felt they were outside mainstream society since their youth and nearly half report that they grew up with parents who were substance user.<sup>13</sup>

Both genders report using methamphetamine to increase energy, to work longer hours, to increase self-confidence, to decrease depression, to lose weight, to increase sexual pleasure, and to party. Men more consistently list increased sexual pleasure as a reason for use while women more consistently list weight loss and increased self-confidence as motivations.<sup>13</sup>

Since methamphetamine dissolves readily in water, it can be added to a beverage and ingested, snorted, smoked, or injected. Snorting has declined in popularity as powder meth has been replaced with imported crystal meth, possibly because the potency and consistency of the newer product may cause more damage to the nasal mucosa (15%). The popularity of injecting has declined slightly as well, from 29% to 22%, yet some users believe that injecting provides the best high and is the most efficient use of the drug. Currently, in rural and urban areas alike, smoking crystal meth in a glass pipe, modified light bulb, or from aluminum foil has become the most common mode of ingestion (56%). The vast majority of users also use other drugs regularly, especially alcohol and marijuana, to enhance or mellow out the meth high.<sup>9,13</sup>

Patterns of use vary among users and vary over time.

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Some users report using meth only occasionally to improve performance on the job, for recreation, or to combat severe fatigue (such as the fatigue associated with HIV infection). It is unclear how many actually continue at this minimal level of use over time since most studies enroll primarily habitual users. Among habitual users, two dominant patterns of early use emerge. The first pattern is one of escalation from sporadic, low-dose, functional use to higher-dose recreational weekend use, and eventually shifting to obsessive daily use. The other pattern starts with weekend recreational use and gradually takes over weekdays as well.<sup>13</sup> Both patterns tend to lead toward fixation on the drug to the exclusion of nearly everything else, multi-day binges, and consequent loss of job, family, and children. The users in the Colorado study were most likely to enter treatment only after losing custody of their children or in response to a court order. Most did not remain sober until they were self-motivated to make the change in lifestyle. Interestingly, at least two young women reported abstaining during pregnancy without treatment until immediately following delivery.<sup>13</sup>

### Signs of Use

Initial or sporadic methamphetamine use often results in weight loss and increased productivity that may inadvertently be reinforced by family members, employers, health care providers, and society. As use increases, weight loss and malnutrition can become extreme (especially in women), activity becomes repetitive and non-productive, the skin may develop sores from picking at imagined “meth bugs,” teeth decay and breakage (“meth mouth”), and appearance becomes unkempt. More subtle signs of use include clenching the jaw, sucking on hard candies to relieve dry mouth, speaking very fast, shifting focus, and being unable to sit still or focus on a conversation. Health care practitioners may observe elevated blood pressure and pulse rate along with dilated pupils among active users. Female users may present with vaginal or anal tearing from prolonged sexual activity. The long-term effects of meth use are not well known, and the potential for full cognitive and psychological recovery remains controversial.<sup>26,27</sup>

Family members, friends, co-workers, mental health counselors, schools, social services, and law enforcement officers may be the first to suspect meth use. Families and friends may notice possessions or cash missing, increasing neglect of children and the household, a loss of short term memory, growing paranoia or depression, irritability, and swings between high energy and severe fatigue. Health, dental, and mental health care professionals should be aware that active users often miss appointments or avoid contact with health and dental care providers altogether to avoid detection of their drug use.

### HIV, Hepatitis, and STD Risk

Interviews with current and former rural meth users reveal that many falsely believe that HIV and other STDs do not exist

in rural areas. Although there are fewer people infected with HIV living in rural areas, HIV *does* exist in rural communities and those who are infected may be less likely to get tested or disclose their status due to the stigma attached to HIV/AIDS. Rates of other STDs, like chlamydia and gonorrhea, are often actually higher in rural areas than urban areas, suggesting that unprotected sex is not uncommon outside urban areas. Travel of meth users between rural and urban areas to buy or sell drugs, exchange sex for drugs, and party provides an idea pathway for transmission of such infections.<sup>13</sup>

The enhanced sexual arousal and prolonged erection experienced by some users often leads to sex with casual partners or multiple partners and extended sexual activity that can tear genital or anal tissue. Ironically, chronic use may create erectile dysfunction. As a result, long-term users are turning to long-acting pharmaceuticals to enable them to act on their meth-induced arousal. In rural settings, meth users are most likely to engage in heterosexual vaginal sex, although reports of heterosexual and homosexual anal sex are not uncommon. Trading sex for drugs is a common occurrence and in some circles is part of the meth ritual. Women trading sex for drugs have little power over decisions about condom use or sexual practices. According to users they are “too spun out to think about condoms,” meaning that the clouded thinking of meth users while high and sleep-deprived precludes condom use for nearly everyone nearly all the time. Further increasing risk, detection and treatment of HIV and other STD infections may be delayed since HIV/STD testing in rural areas is often less available, more expensive, and may be perceived as being less confidential.<sup>13</sup>

Injecting methamphetamine increases the risk of HIV and hepatitis infection for those who inject as well as for their sexual partners. Blood-borne viruses, especially hepatitis B and C, can be unknowingly spread by something as simple as sharing a communal water supply to rinse syringes and draw up water to dissolve the drug or by dividing dissolved meth with a previously used syringe. Direct sharing of syringes appears to be more likely among women who are injected by their partners, among men and women who inject in chaotic user networks, and when mental confusion develop during a binge.<sup>13</sup>

### The Rural Setting and Meth Use

Geographic isolation, rural poverty, closed social networks, social stratification, and stigma in rural communities may contribute to the appeal of methamphetamine and the challenges of eradicating it. Remote settings and limited law enforcement resources decrease the likelihood of getting arrested during a drug sale or during meth production. Travel between communities and counties to buy, sell, or use drugs and/or access services, makes users difficult to identify, track, and treat. Low paying, tedious jobs make meth use and selling meth for large profits enticing. Inadequate mental health and drug counseling services and the vast distances required to access them can be substantial barriers to treatment. Closed



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social networks and stigma associated with poverty, drug use, and HIV increase the feeling of being an outsider, making the meth scene an attractive social option. Similarly, becoming and remaining sober become more difficult since it is nearly impossible to avoid people and places that stimulate drug cravings in rural settings.<sup>13</sup>

### Implications for Native American Communities

Although this study of rural methamphetamine use cannot be generalized to the Native American population, the findings may be applicable in many respects. Like other rural communities, American Indian and Alaska Native (AI/AN) communities suffer from limited resources to control the influx of drugs into the community, provide adequate drug and mental health treatment near people's homes, respond to the child welfare needs of those living in homes with methamphetamine use, and prevent and screen for HIV, hepatitis, and other STDs. AI/AN communities suffer disproportionately from widespread poverty, which opens the door for meth use as an escape from hopelessness and low self-esteem and for meth distribution as a means for making money.

On the other hand, AI/AN communities bring unique assets to the table through strong cultural traditions and values, as well as through existing comprehensive health care systems (such as the Indian Health Service) that are experienced in coordinating medical, counseling, and social services. Tribal justice systems may be ideal for establishing drug courts that have been successful in some rural communities.<sup>13,28</sup> Living in a small, close-knit, rural community can be an advantage in facing the methamphetamine problem, since those who are using the drug and those who are trying to find solutions to the problem are likely to be friends, neighbors, or family. The challenge is to capitalize on the advantages of a close social network while protecting the confidentiality of those needing help.

Interviews with service providers in rural Colorado suggest that communities working together, leveraging resources, and drawing on their cultural strengths provide the best opportunity for preventing and reducing methamphetamine use.<sup>13</sup> Increasing community awareness of the signs of methamphetamine production and use helps to identify and treat users earlier and eliminate sources of local production. Ensuring that there are non-judgmental places to go for health, mental health, and drug treatment services is essential.

Coordinating efforts and resources of health care providers, mental health counselors, law enforcement, social services, community leaders, policy makers, and educators can result in action plans to *prevent* use by:

- increasing awareness of the signs and dangers of methamphetamine use
- sponsoring effective youth asset development activities
- treating underlying mental health problems
- identifying and eliminating drug distribution sources
- enhancing programs to combat poverty

Perhaps even more challenging, it requires community will and advocacy to garner the resources to *reduce* existing meth use by:

- identifying and treating users early through worksite screening, traffic violation screening, health and dental provider screening, and facilitation of treatment
- securing public and private funds to add *long term* meth treatment options (12 to 18 month intensive outpatient programs and residential beds) that will keep those in treatment close to their families
- exploring community-based options such as drug courts and meth watch groups
- reducing HIV/STD risks by educating the community that HIV and STDs are rural health risks, testing known and probable users and their partners for HIV, hepatitis, and other STDs, and providing them with adequate treatment.

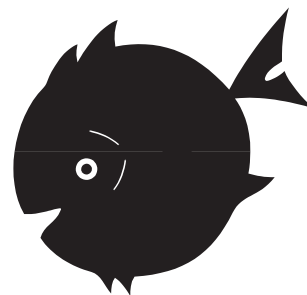
### Conclusions

Methamphetamine use is an ongoing problem for rural AI/AN communities that threatens social cohesion, depletes limited resources, and increases community risk of HIV and other STD infections. However, meth use and HIV/STD risk can be reduced by collaborative community prevention, early detection, and treatment efforts.

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# Methamphetamine and Child Abuse in Native America

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*Roe Bubar, JD, Associate Professor, School of Social Work and Ethnic Studies at Colorado State University, Fort Collins, Colorado; and Diane Payne, Children's Justice Specialist, Tribal Law Policy Institute, Anchorage, Alaska*

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As the methamphetamine epidemic spreads from west to east, states, federal agencies and county governments have mobilized in a collaborative effort to respond to the continuing problem of methamphetamines in America. Rural communities have been particularly hard hit because of limited resources, creating an ideal environment for methamphetamine production and sale. While recent precursor legislation may help to reduce small lab production of methamphetamines, sale of the drug and the resultant addictions continue to plague communities in rural, urban, and suburban communities.

Tribal communities have also been targeted for methamphetamine use and sale for similar reasons, yet tribes do not have the necessary infrastructure or resources to respond to the methamphetamine crisis emerging in Native America. The chronic underfunding of law enforcement, social services, mental health, and health care sets tribal communities apart as particularly vulnerable to methamphetamine use and sale. It appears tribes have been experiencing a rise in methamphetamine use over the past five years. Current treatment data indicate that users are more likely to be white, with a substantial proportion of Asian/Pacific Islander users and a growing problem emerging among Native Americans.<sup>1</sup>

As a relatively cheap stimulant, methamphetamines create a sense of euphoria for users; it is not surprising methamphetamines have found a niche in tribal communities where poverty, depression, high unemployment, and substance abuse issues already exist as serious challenges.

In testimony provided in April 2006 at the Oversight Hearing on The Problem of Methamphetamine in Indian Country, Jefferson Keel, Vice President of the National Congress of American Indians, testified that many tribes are reporting higher incidences of child abuse and neglect related to methamphetamine use, and the National Indian Child Welfare Association estimates that 80 - 85% of families in the child welfare system have alcohol and substance abuse problems. California Legal Services, experienced in working with tribes on child abuse and neglect issues, reports that in child abuse and neglect cases, nearly every parent they see is somehow involved with methamphetamines.<sup>2</sup> At the Oversight Hearing, witnesses provided testimony from tribal communities on methamphetamine-related violence, crime, large drug busts, and other incidents that have brought tribes

into the regional and national news.

Historically, there has been very little funding available for tribes to effectively address and sustain a response to child abuse and neglect. Although states can access funds via the Title XX Social Services Block Grant Program, Tribal governments are ineligible to receive these funds (despite the fact that tribal members are used in determining state allocations for monies) and states are not required to share or allocate their funds to tribes. With the methamphetamine crisis in Indian Country, tribes are in a critical situation to address serious addiction challenges and increased use of an overburdened and underfunded social service system.

Since 1989, funding has been provided through the Office for Victims of Crime (OVC) to federally-recognized tribes through the Children's Justice Act (CJA) Partnerships for Indian Communities grant program. These funds were established to assist tribes to develop, establish, and operate programs to improve how child abuse cases, particularly child sexual abuse cases, are handled and to reduce trauma to child victims. With the support of training and technical assistance from the Tribal Law and Policy Institute, 10 - 13 tribes and tribal organizations propose interdisciplinary projects (between law enforcement, medical, social services, prosecution, and education) to address their community needs related to serious child abuse. At the end of the three-year funding period, the projects are expected to end or become sustained through another funding source. Because of increasing methamphetamine-related child abuse reports, since 2003 CJA grantee tribes have requested training and technical assistance from the Tribal Law and Policy Institute grantees to understand and address methamphetamine use and child abuse in their communities.

Tribal service providers and law enforcement in the CJA grantee tribes reported that families were selling their furniture, personal belongings, family heirlooms, cars, and homes, and even prostituting their children to maintain their methamphetamine addictions.<sup>3</sup> Some tribes have reported increased and more severe levels of child abuse where methamphetamine is involved, such as the 80% of the 500 reports of child abuse at San Carlos Apache that involved drugs and alcohol abuse, including methamphetamines.<sup>4</sup> An increasing number of tribes report that babies from their communities are testing positive for methamphetamines at birth. Some tribes have reported a dramatic increase in the number of babies being born affected by methamphetamine; on one reservation 64 of 256 babies were born last year to tribal members addicted to methamphetamine.<sup>5</sup> Methamphetamines lower inhibitions and judgment, thereby increasing the risk for

users to participate in unprotected sexual activity. Injecting methamphetamines and participating in unprotected sexual activity increase the risk of sexually transmitted diseases, HIV and hepatitis B and C. In 2004 American Indians and Alaska Natives had rates of HIV of 7.9 per 100,000.<sup>6</sup>

In 2006, in response to expressed tribal challenges and needs, the Tribal Law and Policy Institute surveyed members of three tribal communities in the west about methamphetamine use and its impact on child maltreatment, permanency outcomes, and agency workloads. The Tribal Law and Policy Institute, working with Roe Bubar, an Associate Professor in the School of Social Work & Ethnic Studies at Colorado State University, sponsored the survey to examine the perceptions of professionals regarding, as per the title, *Methamphetamine Use and the Incidence of Child Abuse in Tribal Communities*.

Preliminary data have been gathered, and overall there appears to be a significant problem with methamphetamine use in these three tribal communities, with serious implications for children, families, and systems. Participants reported great awareness of methamphetamine use and some awareness of methamphetamine production and distribution in their communities. Participants also reported increases in the incidence of child abuse and neglect, as well as domestic violence and sexual assault. Furthermore, respondents reported strong awareness of increases in child abuse allegations and out-of-home placements that involved a methamphetamine investigation.

Although the three communities differed slightly on views toward barriers to permanency, respondents were very aware of methamphetamine involvement increasing the difficulty of family reunification. Additionally, participants reported awareness of increases in the workload of law enforcement, social services, child protection, and other agencies in tribal communities as a result of methamphetamines. There were also some indications that training is available for child welfare professionals and that agencies are beginning to work together to address methamphetamine use. Finally, there was almost no awareness of any treatment for methamphetamine users or for resources and services available to children exposed to methamphetamines.<sup>7</sup>

Although the scope of the research is limited, it confirms much of the anecdotal reporting provided as federal-tribal workgroups begin to discuss the impacts of methamphetamines, as well as testimony presented to Congress. The impact of methamphetamine on tribal children and their families is critical. Former methamphetamine addicts talk of losing their spirit, of losing their soul.<sup>8</sup> As pointed out in the survey, the loss is not only personal, but creates serious challenges for families, tribal economies, health care, cultural learning, and environmental impacts to tribal communities.

The devastation wreaked by methamphetamine has largely gone uninterrupted as a result of the lack of resources, jurisdictional complexities, and the limited coordination with state, federal, and tribal agencies. These challenges have left Indian Country and its bordering communities vulnerable to cartels and others who manufacture and sell methamphetamines.

In 2005, a large drug ring operating on several reservations was broken, and 25 people, including drug ring leader Jesus Sagaste-Cruz, were federally charged. After sentencing, Sagaste-Cruz reported that he was able to sell methamphetamines on reservations in South Dakota, Montana, Wyoming, and Nebraska because of loopholes in federal laws and limited law enforcement presence.<sup>9</sup> During the four-year investigation into the Sagaste-Cruz drug trafficking network, federal investigators estimated that more than \$3 million were spent by residents on one reservation on methamphetamines. As one survey participant reminds us, "People say there is something in the air here. I say that something is methamphetamine. It is in our air, water, soil; it is in our people and in our children."

*The opinions, findings, and conclusions expressed in this document are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice or Colorado State University.*

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# Methamphetamine in Indian Country: A Law Enforcement Perspective

DuWayne W. Honahni Sr., National Drug Control Coordinator, Office of Law Enforcement Services, Bureau of Indian Affairs, US Department of the Interior, Washington, DC

Methamphetamine has impacted all of us in one way or another, whether by choice or not. In March 2006, the Bureau of Indian Affairs (BIA), Office of Law Enforcement Services (OLES) — now known as the Office of Justice Services (OJS) — requested the assistance of various BIA and tribal law enforcement agencies to respond to a survey to identify the threat level caused by methamphetamine production and use on tribal lands and the impact of methamphetamine on tribal communities and law enforcement agencies. Almost 100 (N = 96) Indian Country law enforcement agencies responded; some of the results included the following:

Supply and Production	
• Powdered meth in high supply	43%
• Crystal meth in high supply	46%
• High rates of meth production on reservation	16%
Community Impact	
• Greatest threat to the community	74%
• Related arrests increased in last year	60%
• Increase in domestic violence	64%
• Increase in assault and battery	64%
• Increase in burglaries	57%
• Increase in child abuse and neglect cases	48%
Law Enforcement Challenges	
• In need of drug investigation training	90%
• Paying more overtime to officers	75%
• Not participating in an interagency law enforcement task force	51%
Community Resources	
• Meth rehab program available	31%
• Interagency or community prevention coalitions in place	66%
• Planning a meth prevention coalition	19%
Drug Courts	
• No drug court	56%
• Planning on creating a drug court	14%

OLES has already utilized these data to make informed policy decisions. One example of this is the restructuring of the BIA-OJS Drug Enforcement Program to refocus its efforts in developing stronger interagency partnerships at the national,

regional, and local levels, to provide drug enforcement training to a broader range of law enforcement officers and agents, and to become more engaged in education and prevention efforts to reduce the demand for illegal drugs in Indian Country.

Today, almost every tribe has programs that address various community issues separately. However, communication “gaps” exist between the programs that can cause conflict. For example, law enforcement and detention personnel are often unaware of IHS policies and procedures in handling intoxicated persons who are transported to local facilities for treatment and often wonder why they will not be accepted for examination. Cooperation and communication are essential to addressing community issues such as the one we are now facing with methamphetamine. No one program can take on this issue alone. When each program understands the other programs’ roles and responsibilities, collaboration begins.

With this in mind, the BIA-OJS, has redirected its focus toward the Law Enforcement/Community Empowerment Initiative. The goal of this initiative is to empower local tribal law enforcement agencies with the ability to conduct and complete integrity-based drug investigations by providing them a strategic plan that includes assessments, mission and goal statements, policies and procedures, interagency networking, intelligence sharing, and drug enforcement training. This concept also emphasizes the relationship between law enforcement and community, including tribal courts, education systems, and health care providers. It also enhances proactive prevention initiatives to reduce the demand for drugs, such as Community Oriented Policing, Community Drug Awareness presentations, D.A.R.E. (Drug Abuse Resistance Education), and G.R.E.A.T. (Gang Resistance Education and Training). Armed with this concept, tribal law enforcement can effectively do their part in a collaborative effort with its community.

History has proven there will be new drugs coming on the scene, often more potent and destructive than those that came before. As we all know, drug abuse inflicts horrific damage on our Indian communities. Unique tribal cultures are being devastated and destroyed. Children engaged in drug use fail in school and lose respect for their parents, elders, culture, and ultimately in themselves.

*The presentation herein is that of the author and may not necessarily reflect the opinions, official policy, or position of the Office of Justice Services, the Bureau of Indian Affairs, the Assistant Secretary – Indian Affairs, the U.S. Department of the Interior or any other US government entity.*

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# Federal Criminal Jurisdiction to Prosecute Criminal Cases in Indian Country

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*Leslie A. Hagen, Assistant United States Attorney, Executive Office of United States Attorneys; and Christopher B. Chaney, Deputy Director, Bureau of Indian Affairs, Office of Justice Services, U.S. Department of Interior; Washington, DC*

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## Introduction

Methamphetamine is destroying lives, families, and tribal cultures within Indian Country. In addition to the damage it causes to individual users, meth spawns homicides, assaults, child neglect, domestic abuse, and other violent crimes. By understanding federal criminal jurisdiction, we will have a better understanding of the use of the federal criminal justice system in the war against meth. This article is an attempt to set out the basic statutory framework used in the *federal* prosecution of crimes arising in Indian Country.

This article does not purport to be comprehensive, as to either the statutes themselves or their interpretation in all the federal circuits that include Indian Country jurisdiction. Rather, the purpose of the article is to provide a basic primer applicable to the heartland case.

## General Consideration

Jurisdiction over crimes in Indian Country arises out of the unique sovereign relationship between the federal government and Indian tribes and nations. This relationship is based upon the United States Constitution and over 150 years of federal law recognizing the sovereignty of Indian tribes and nations [see US Constitution, Art. I, § 8 (granting power to Congress to regulate commerce with Indian nations), and Art. II, § 2 (granting to executive branch power to make treaties with advice and consent of Senate); *Worcester v. Georgia*, 31 U.S. 515 (1832); *Kagama v. United States*, 118 U.S. 375 (1886)].

## Federal Criminal Jurisdiction in Indian Country

The statutory basis for federal jurisdiction over crimes occurring in Indian Country is contained in Chapter 53 of the Federal Criminal Code, 18 U.S.C. § 1151 *et seq.* However, much of federal Indian law derives from more than a century of federal court decisions.

*Definition of Indian Country for Purposes of Federal Jurisdiction.* “Indian Country” is defined in 18 U.S.C. § 1151 as including (a) all land within the boundaries of the reservations of federally recognized Indian tribes, including patented land and any rights-of-way running through the reservation; (b) dependent Indian communities; and (c) Indian allotments to which title has not been extinguished, including

any rights-of-way running through the allotment. As an element of the offense, the government must prove that the crime took place on a reservation or other Indian land. Determinations of Indian Country status are based on land records or factual determinations showing that the area is a “dependent Indian community.”

*Determination of Who Is an Indian for Purposes of Federal Jurisdiction.* The criminal statutes do not define the term “Indian”; however, the Supreme Court has articulated a test based on (a) the degree of Indian blood (a slight degree is sufficient), and (b) whether the tribal or federal governments recognize the person as Indian. Indicia of tribal or federal recognition include enrollment in a tribe, informal or formal government recognition through assistance provided only to Indians, enjoying the benefits of tribal affiliation, and social recognition as an Indian through residence on the reservation and participation in Indian culture and social life. It may also be necessary to consult individual Congressional Acts that govern the status of individual tribes.

Tribal membership can generally be established by use of tribal records. Enrollment in a tribe is not an absolute prerequisite for holding status as an Indian, but it is the most common means of proof of that element. In most cases, the Indian or non-Indian status of the offender or victim is not a material issue. The tribe must be federally recognized for the person to be considered an Indian subject to federal criminal jurisdiction under 18 U.S.C. § 1153. Canadian tribes are not federally recognized for purposes of treating their tribal members as Indian offenders or victims in the United States.

## Federal Statutes Governing Federal Criminal Jurisdiction in Indian Country

Federal jurisdiction over most crimes occurring in Indian Country can be asserted by applying one of two statutes, the Major Crimes Act, 18 U.S.C. § 1153, or the Indian Country Crimes Act, 18 U.S.C. § 1152. In addition, there are a small number of substantive statutes that expressly apply in Indian Country.

## The Major Crimes Act

*General application.* The Major Crimes Act, 18 U.S.C. § 1153, provides federal criminal jurisdiction over certain specified crimes if the offender is Indian. The crimes specified in § 1153 are commonly called the “major crimes.” These are murder, manslaughter, kidnapping, maiming, any felony under Chapter 109A of Title 18 (the sexual abuse statutes), incest,

assault with intent to commit murder, assault with a dangerous weapon, assault resulting in serious bodily injury, assault against a child under sixteen, felony child abuse or neglect, arson, burglary, robbery, and felony theft. Where the specified offense is not contained in the federal criminal code — such as for child abuse, child neglect, incest and burglary — § 1153(b) directs that state law be assimilated. So long as the offender is an Indian, the victim's tribal affiliation (or lack thereof) is irrelevant under § 1153. However, § 1153 is the main source of federal jurisdiction for crimes in which both the offender and the victim are Indians, and the only jurisdictional hook is that the crime occurred in Indian Country.

*Crimes by Indians against non-Indians.* If the offender is Indian but the victim is not, the Major Crimes Act applies to confer jurisdiction over the specified major crimes, and the Indian Country Crimes Act, discussed below, provides jurisdiction for other felonies and misdemeanors. As a result, there are more crimes that can be federally prosecuted involving an Indian who commits a crime against a non-Indian than involving an Indian who commits a crime against another Indian.

*Misdemeanors.* There are very few situations where there is federal jurisdiction under § 1153 to prosecute Indians who commit misdemeanors against other Indians in Indian Country. One exception is simple assault on a person under 16 years of age (18 U.S.C. § 113(a)(5)). The theoretical basis for this result is that tribal courts should handle misdemeanor offenses.

*Exclusivity of federal jurisdiction.* Finally, as discussed below, the jurisdiction encompassed in § 1153 is exclusive federal jurisdiction. While tribal courts retain jurisdiction to prosecute Indians for conduct that might constitute a § 1153 felony, since tribal court jurisdiction to sentence offenders is limited to no more than one year imprisonment per charge, the authority to prosecute the conduct as a felony lies exclusively with the federal government.

### The Indian Country Crimes Act

*General application.* The Indian Country Crimes Act, 18 U.S.C. § 1152, applies where either (1) the offender is not an Indian, but the victim is, or (2) the offender is Indian, but the victim is not, the crime is a non-§ 1153 crime, and the Indian offender has not already been punished by the tribe for that conduct.

In Indian Country prosecutions under § 1152, substantive federal criminal statutes that otherwise apply on federal lands may be “borrowed” pursuant to the Federal Enclaves Act, 18 U.S.C. § 7. In other words, the types of criminal conduct prohibited by the Major Crimes Act are also prohibited by § 1152. In addition, enclave crimes can also be borrowed in § 1152 prosecutions, such as receiving stolen property (18 U.S.C. § 662) and conspiracy to commit murder (18 U.S.C. § 1117). Federal misdemeanors can also be borrowed under § 1152.

*Assimilation of state crimes.* Where there is no applicable substantive federal crime, the law of the state in which the

crime occurred may be incorporated into the federal criminal code in § 1152 prosecutions pursuant to the Assimilative Crimes Act, 18 U.S.C. § 13. State misdemeanors can also be assimilated.

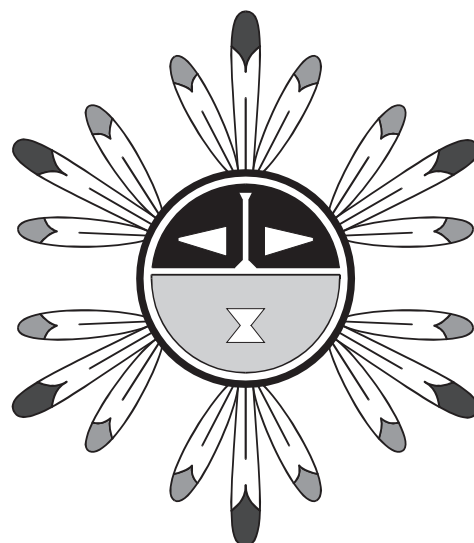
*Exceptions to application.* As stated above, the Indian Country Crimes Act, § 1152, does not apply where one Indian has committed an offense against another Indian, nor where an Indian commits an offense in Indian Country if that individual has been punished by the local law of the tribe.

### Statutes of General Applicability

Most federal criminal statutes do not specifically reference Indians or Indian Country. The question arises whether these general criminal statutes apply to offenses in Indian Country. Most courts considering this issue have ruled “that statutes of general applicability apply unless they would adversely impact rights reserved by treaty or statute or unless they would adversely impact matters essential to tribal self-governance, and then only if Congress has not specifically indicated an intent that the statute apply.” F. Cohen, *Handbook of Federal Indian Law* 751 (2005 ed.). Thus, most circuits have concluded that federal drug laws, because they do not involve situs as an element, apply within Indian Country. See *United States v. Drapeau*, 414 F.3d 869 (8<sup>th</sup> Cir. 2005); *United States v. Brisk*, 171 F.3d 514 (7<sup>th</sup> Cir. 1998); *United States v. Blue*, 722 F.2d 383 (8<sup>th</sup> Cir. 1983).

The fact that federal drug offenses are applicable in Indian Country is especially important in the fight against methamphetamine in that it allows for felony federal prosecution of persons dealing meth, or other illegal drugs, within Indian Country.

*The views reflected in this article are those of the authors and do not necessarily reflect the views of the Executive Office for United States Attorneys, the Department of Justice, the Bureau of Indian Affairs, or the Department of the Interior.*



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# Online Methamphetamine Resources

*Lori de Ravello, MPH, CDC Assignee to the IHS National STD Program, Albuquerque, New Mexico*

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## Rural Issues

Drug Abuse in America: Rural Meth — Council of State Governments: [http://www.appa-net.org/grant%20and%20special%20projects/docs/Methlab\\_materials.pdf](http://www.appa-net.org/grant%20and%20special%20projects/docs/Methlab_materials.pdf)

Meth Info — Rural Assistance Center: [http://www.raconline.org/info\\_guides/meth/](http://www.raconline.org/info_guides/meth/)

Rural Methamphetamine Use and HIV/STD Risk — Rural Center for AIDS/STD Prevention: <http://www.indiana.edu/~aids/factsheets18.pdf>

## STD/HIV/Hepatitis C Risks

CDC Consultation on Methamphetamine Use and Sexual Risk Behavior for HIV Infection: Summary and Suggestions: <http://www.harmredux.org/HIVarticles/ManserghMethaCDChi vR06.pdf> Methamphetamine and HIV: Basic Facts for Service Providers: [http://www.hivguidelines.org/public\\_html/health-bulletins/Crystalmeth033106.pdf](http://www.hivguidelines.org/public_html/health-bulletins/Crystalmeth033106.pdf)

## Health Effects

Medical Realities of Meth Use and Recovery: [http://www.psattc.org/assets/powerpoint-gallery/Medical%20Realities%20of%20Meth%20Use%20and%20Recovery\\_6-18-06\\_files/frame.htm](http://www.psattc.org/assets/powerpoint-gallery/Medical%20Realities%20of%20Meth%20Use%20and%20Recovery_6-18-06_files/frame.htm)

Meth Mouth — American Dental Association: <http://www.ada.org/public/topics/methmouth.asp>

National Clearinghouse for Drug and Alcohol Information (SAMHSA): <http://ncadi.samhsa.gov>

## Child Abuse and Protection Issues

The Impact of Meth on Foster Care, Children, and Families: <http://www.connectforkids.org/node/4292>

Meth and Child Welfare: Promising Solutions for Children, their Parents, and Grandparents: [http://ipath.gu.org/documents/A0/Meth\\_Child\\_Welfare\\_Final\\_cover.pdf](http://ipath.gu.org/documents/A0/Meth_Child_Welfare_Final_cover.pdf)

## Data, Research, and Science

Meth Resources — Office of National Drug Control Policy: <http://www.methresources.gov/>

National Institute of Drug Abuse (NIDA): <http://www.nida.nih.gov/DrugPages/Methamphetamine.html>

Office of Applied Studies — Substance Abuse and Mental Health Services Administration (SAMHSA): <http://oas.samhsa.gov/amphetamines.htm>

## Other Meth Information

KCI: The Anti-Meth Site: [http://www.kci.org/meth\\_info/links.htm](http://www.kci.org/meth_info/links.htm)

Meth Action Clearinghouse — National Association of Counties: <http://www.naco.org>

Methamphetamine Information — Drug Enforcement Agency: <http://www.dea.gov/concern/amphetamines.html>

Meth Information and Resource Center — Partnership for a Drug Free America: [http://www.drugfree.org/Portal/Drug\\_Issue/MethResources/default.html](http://www.drugfree.org/Portal/Drug_Issue/MethResources/default.html)

Meth Madness: <http://www.methmadness.com/methmadnessmain.html>

Mind Over Matter — NIDA for Teens: [http://teens.drugabuse.gov/mom/mom\\_meth1.asp](http://teens.drugabuse.gov/mom/mom_meth1.asp)

The National Alliance for Drug Endangered Children: <http://www.nationaldec.org/>





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*Editor's Note: The following is a digest of the monthly Obstetrics and Gynecology Clinical Consultant's Newsletter (Volume 4, No. 11, November 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 Regular Cola Intake Reduces Bone Mineral Density in Women

**Background:** Soft drink consumption may have adverse effects on bone mineral density (BMD), but studies have shown mixed results. In addition to displacing healthier beverages, colas contain caffeine and phosphoric acid (H<sub>3</sub>PO<sub>4</sub>), which may adversely affect bone.

**Results:** Cola intake was associated with significantly lower (P < 0.001-0.05) BMD at each hip site, but not the spine, in women, but not in men. The mean BMD of those with daily cola intake was 3.7% lower at the femoral neck and 5.4% lower at Ward's area than of those who consumed <1 serving cola/mo. Similar results were seen for diet cola and, although weaker, for decaffeinated cola. No significant relations between noncola carbonated beverage consumption and BMD were observed. Total phosphorus intake was not significantly higher in daily cola consumers than in nonconsumers; however, the calcium-to-phosphorus ratios were lower.

**Conclusions:** Intake of cola, but not of other carbonated soft drinks, is associated with low BMD in women. Additional research is needed to confirm these findings.

Tucker KL, et al. Colas, but not other carbonated beverages, are associated with low bone mineral density in older women: The Framingham Osteoporosis Study. *Am J Clin Nutr*. 2006 Oct;84(4):936-42.

### OB/GYN CCC Editorial comment Bone Density Evaluation in Teens Prevents Future Osteoporosis

While regular cola consumption has many detrimental effects, e.g., obesity and dental caries, Tucker, et al now have added a new item to that list, bone loss in women. Below are excerpts from Loud and Gordon in October's *Archives of Pediatrics and Adolescent Medicine* article on adolescent bone health.

**Clinical Context.** Peak bone mass, which reaches its maximum between ages 20 to 29 years, is a predictor of osteoporosis. Up to 60% of adult total bone mineral is acquired during adolescence, according to Bonjour and colleagues in the September 1991 issue of the *Journal of Clinical Endocrinology and Metabolism*. Factors that affect bone health include the following: body weight, exercise, medications, hormonal status, genetics, calcium, vitamin D, general health, nutrition, and

other lifestyle factors. This review examines patients at risk for poor skeletal health, methods for evaluation of skeletal status, indications for bone density measurement, therapies for low BMD, and recommendations for physical activity and nutrition in adolescents.

#### *Pearls for Practice*

- Conditions associated with poor bone health include chronic conditions, endocrinopathies, medium- to long-term use of certain medications, deleterious behaviors, and bone disease. Evaluation of BMD by QCT and DEXA must be adapted for children. Long-term effects of medication treatment need to be studied in adolescents.
- Recommendations for all adolescents include exercise during peak height velocity, dietary calcium of 1300 mg/day for ages 9 to 18 years and 1000 mg/day for ages 19 to 50 years, and vitamin D 200 IU/day for all children; an optimal exercise regimen has not been determined.

Loud KJ, Gordon CM. Adolescent bone health. *Arch Pediatr Adolesc Med*. 2006 Oct;160(10):1026-32.

### From Your Colleagues Dawn Wyllie, Bemidji Area Perinatal Depression Evidence-Based Care

This 92-page narrative with twice again as many pages of references, glossary, tables, and appendices published in 2005 should be a ready reference for those of you who want to understand the research surrounding perinatal depression prevalence and screening. Although limited, the available research suggests that depression is one of the most common perinatal complications and that screening is feasible and fairly accurate.

AHRQ report: Evidence Report/Technology Assessment Number 119 Perinatal Depression: Prevalence, Screening Accuracy and Screening Outcomes. <http://www.ahrq.gov/clinic/tp/perideptp.htm>.

### Other Depression Resources from Judy Thierry

Depression – focusing on moms who present during a child health visit. In this 1 credit CME/CEU exercise, the following are discussed, among many other items: awareness and facilitating screening, Parental depression is just not post partum, Screening tools in the office, PHQ2, Edinburgh. Go to

<http://www.medscape.com/viewprogram/6101>.

More on depression is available from the Commonwealth Fund web site: [www.cmf.org](http://www.cmf.org). Go to “search” and type in “depression.” You will find PDFs, slides, and brochures, as well as the following:

- Wallet guide
- PowerPoint Feeling Blue communication poster
- Two-page guide for providers on “parenting for depression”
- Parents’ frequently asked questions on screening
- Guide for parents – when times are tough – age specific guidance
- Can a depressed parent be a good parent – you bet!
- Tips on healthy parenting for mothers with depression
- Why is parental depression an important issue
- PowerPoint poster on facts on depression
- Summary of brief paper-based depression screening tools

A one-minute questionnaire now being used in primary care settings. It is sometimes referred to as PQ2. Go to [http://www.cmf.org/usr\\_doc/PHQ2.pdf](http://www.cmf.org/usr_doc/PHQ2.pdf).

Over the past two weeks, how often have you been bothered by any of the following problems?

Little interest or pleasure in doing things.

- 0 = Not at all
- 1 = Several days
- 2 = More than half the days
- 3 = Nearly every day

Feeling down, depressed, or hopeless.

- 0 = Not at all
- 1 = Several days
- 2 = More than half the days
- 3 = Nearly every day

Total point score: \_\_\_\_\_

## Features

### Obstetrics

#### Magnesium Sulfate Tocolysis: Time to Quit

Intravenous magnesium sulfate tocolysis remains a North American anomaly. This therapy rose to prominence based on poor science and the recommendations of authorities. However, a Cochrane systematic review concluded that magnesium sulfate is ineffective as a tocolytic. The review found no benefit in preventing preterm or very preterm birth. Moreover, the risk of total pediatric mortality was significantly higher for infants exposed to magnesium sulfate (relative risk 2.8; 95% confidence interval 1.2–6.6). Given its lack of benefit, possible harms, and expense, magnesium sulfate should not be used for tocolysis. Any further use of magnesium sulfate for tocolysis should be restricted to formal clinical trials with approval by an institutional review board and signed informed consent for participants. Should tocolysis be desired, calcium channel

blockers, such as nifedipine, seem preferable.

Grimes DA, Nanda K. Magnesium sulfate tocolysis: time to quit. *Obstet Gynecol*. 2006 Oct;108(4):986-9.

## OB/GYN CCC Editorial comment

### Remove Magnesium Sulfate from your Facility’s Tocolysis Guidelines

While this is not news, it is a good reminder that there never have been good, randomized data to support the use of magnesium sulfate for tocolysis. In the acute setting nonsteroidal anti-inflammatory agents such as indomethacin have a better success rate, as measured by lowering the occurrence of low birth weight and prolonging pregnancy. The online article has a complete explanation, plus alternative medications.

## Gynecology

### No Stirrups Preferred for Pelvic Examinations

Do women feel more comfortable and less vulnerable if stirrups are not used as part of a speculum examination? Here are the results of a randomized controlled trial (nonblinded).

The embarrassment and fear of discomfort from the speculum examination often prevent women from seeking routine cervical cancer screening. One problem might be the use of stirrups to support the legs of women undergoing a pelvic examination. Stirrups are commonly used in the US but are not routine in other countries. The authors of this study evaluated whether the use of stirrups increased pain and the feeling of vulnerability in 197 adult women presenting for a routine examination.

The women were randomized to a speculum examination using stirrups or one without stirrups. The stirrups were used to hold the legs at a 30- to 45-degree angle off the table. Women in the no-stirrup group were placed at the end of the table with their heels on the corners of the fully deployed extension of a standard examination table. Women in both groups were fully draped and underwent a standard pelvic examination with the examiner obtaining a cervical smear.

Physical discomfort and sense of vulnerability, measured following the examination using a 100-mm visual analog scale, were significantly lower in the no-stirrup group: the mean physical discomfort score was 43 percent lower (17.2 versus 30.4), and the sense of vulnerability was 44 percent lower (13.1 versus 23.6). Sense of loss of control was not significantly different between the two groups.

The quality of the smears was similar in the two groups. The researchers did not report the comfort of the examiner with either method or how they avoided having the speculum handle hit the table extension. The study was unblinded because the women knew whether they were in stirrups or not. Most of the women had already had one or more speculum examinations; the study would have been more effective had they enrolled women who had never had a pelvic examination using stirrups.

*Bottom Line:* To decrease discomfort and sense of vulnerability, women undergoing a routine pelvic examination should be offered the option of not using stirrups. On average,

women will find this position more comfortable and will feel less exposed (level of evidence: 1b).

Seehusen DA, et al. Improving women's experience during speculum examinations at routine gynaecological visits: randomised clinical trial. *BMJ* July 22, 2006;333:171.

## Child Health

### Early Adolescents Worry More as they Age

They also appear more likely to keep worries to themselves as they go through this stage of development. The authors found the following:

- Adolescents worried weekly most about school grades and least about their friends' problems. There were no significant age or gender differences for total weekly worrying.
- Compared to boys, girls worried weekly more about fitting in at school and about being out of shape or overweight, whereas boys were more likely than girls to have weekly worries about their futures.
- Older students had more weekly worries than younger students about looks or appearance and about being out of shape or overweight. Compared to the youngest students (age 9), the oldest students (age 13) also were more likely to worry about problems at home and about their friends.
- Adolescents who primarily talk to a parent when they are worried were significantly less likely to worry about being liked or fitting in.
- Those who said they usually keep their worries to themselves were at greater risk than the referent category for weekly worries about grades.
- Compared to those who turn to parents, those who turn to friends were more likely to have weekly worries about their friends and about being a failure or disappointing loved ones. Those who preferred the Internet for information about what is worrying them were at greater risk for weekly worries about their future but were less likely to worry weekly about grades than those who turned to parents.

This study highlights the need to pay more attention to the ways students attempt to cope with their worries . . . [and] points to an opportunity to investigate the link between types of adolescent worries and primary sources of worry information utilized by early adolescents.

Brown SL, Teufel JA, Birch DA, et al. Gender, age, and behavior differences in early adolescent worry. *Journal of School Health*. 2006;76(8):430-437.

### PEDS CCC Editorial comment: Steve Holve

Can we develop counseling strategies that make worrying a positive activity? This article highlights what we suspected; teenagers worry. As health care providers, what we need is a mechanism to make worrying useful. We already know from behavioral studies that if a patient doesn't see a condition as a

problem, then they are not ready to change. However, when students do recognize a problem and worry (e.g., "Am I too heavy?" or "Should I really be having sex with three different people?") how can we best use that concern to help teens make healthier lifestyle changes? We all know it is a big step from knowledge to action. It is probably an even bigger step from worry to action. Can we develop counseling strategies that make worrying a positive activity?

## Chronic disease and Illness

### Health Behaviors among American Indian/Alaska Native Women, 1998 – 2000 BRFSS

*Results:* The prevalences of current smoking (27.8%) and obesity (26.8%) were significantly higher among AI/AN women than among all US women. AI/AN women did not meet Healthy People 2010 goals for current smoking, obesity, leisure time physical activity, or binge drinking.

*Conclusions:* These data highlight both disparities in health risk behaviors between AI/AN women and all US women and improvements needed for AI/AN women to meet Healthy People 2010 goals. This project demonstrates the overwhelming need for culturally appropriate and accessible prevention programs to address health risk behaviors associated with the leading causes of death among urbanized AI/AN women.

Doshi SR, Jiles R. Health behaviors among American Indian/Alaska Native women, 1998–2000 BRFSS. *Journal of Women's Health*. Oct 2006;Vol.15,No.8:919 -927.

## Features

### ACOG

#### Umbilical Cord Blood Gas and Acid-Base Analysis

*Abstract:* Umbilical cord blood gas and acid-base assessment are the most objective determinations of the fetal metabolic condition at the moment of birth. Moderate and severe newborn encephalopathy, respiratory complications, and composite complication scores increase with an umbilical arterial base deficit of 12 – 16 mmol/L. Moderate or severe newborn complications occur in 10% of neonates who have this level of acidemia, and the rate increases to 40% in neonates who have an umbilical arterial base deficit greater than 16 mmol/L at birth. Immediately after the delivery of the neonate, a segment of umbilical cord should be double-clamped, divided, and placed on the delivery table. Physicians should attempt to obtain venous and arterial cord blood samples in circumstances of cesarean delivery for fetal compromise, low 5-minute Apgar score, severe growth restriction, abnormal fetal heart rate tracing, maternal thyroid disease, intrapartum fever, or multifetal gestation.

## OB/GYN CCC Editorial Comment

### Cord Gases at Cesarean Delivery and Vaginal Birth: A Best Practice

This is a best practice that Indian health facilities should put into all guidelines.

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Umbilical cord blood gas and acid-base analysis. ACOG Committee Opinion No. 348. American College of Obstetricians and Gynecologists. *Obstet Gynecol.* 2006;108:1319–22.

### **Ask a Librarian: Diane Cooper, MSLS/NIH Want To Keep Up With Evidence-Based Medicine?**

Got time to read 50,000 articles? No? Then take a look at *Evidence-Based Medicine*. From the editorial offices of the *British Medical Journal*, this journal provides information gleaned from over 100 journals. Published six times a year, the most important and valid research articles are presented. For example, here are two current articles that may be of interest.

*Physical exertion during pregnancy.* Physical exertion at work during pregnancy did not increase risk of preterm delivery or fetal growth restriction (*Evidence-Based Medicine* 2006;11:156). This prospective cohort study included 1,908 women over 16 years of age who were 24 - 29 weeks pregnant and stood long hours each week, lifted heavy objects 13 times or more each week, worked nights, or worked greater than 46 hour weeks.

*Continuous dose vs. 28 day OCs.* Six RCTs show similar efficacy and safety for continuous dosing and 28 day combination contraceptive pills (*Evidence-Based Medicine* 2006;11:53). Randomized controlled trials compared continuous or extended combination oral contraceptives with the traditional dosing (21 days of pills) in women of reproductive age.

To find *Evidence-Based Medicine* on the HSR Library website, click ONLINE JOURNALS found on the left panel of the homepage. Next click “E” to get to all journals starting with “E” and scan down to the journal.

### **Breastfeeding: Suzan Murphy, PIMC It Is Official, Breastfeeding Counts**

Obesity is a rapidly escalating problem that could greatly complicate health care in the future. Finding effective ways that reduce obesity and maintain healthy weight are major challenges for health care providers and planners. But research suggests that there is hope – in numerous studies, breastfeeding has been linked with reduced obesity risk throughout childhood and into early adulthood. Additionally, breastfeeding exclusivity and duration are recognized to be inversely related to obesity risk.

Given the current widespread obesity problem and the research that breastfeeding can reduce obesity risk, a GPRA measure has been born. Beginning in 2007, baseline breastfeeding data at specific ages will be established in Indian Country, with the goal of increasing breastfeeding prevalence and duration in the first year of life. It will take numbers to establish baseline data and monitor early feeding practice. The good news is that feeding choice data can now be captured in RPMS and the questions are those already routinely asked by providers in the patient’s first year of life. Using a software patch available to all service units, feeding choice can be indicated at patient visits by PCC, PCC +, and EHR in 2007, than inputted by data entry, and tracked by a V-gen search.

The software patch allows any provider to check one of five feeding choices: exclusively breastfeeding, mostly breastfeeding, half and half, mostly formula, and exclusively formula. The possible confounders that can also be tracked are parity, birth weight, mother’s name/chart number, when solids were started, when breastfeeding stopped, and when regular formula feeding began.

IHS has unique health care records – often spanning entire lifetimes. No other national health care environment provides care for an individual from conception throughout their life. There are limitless opportunities to learn from health behavior/management to improve life long care. How early feeding choice impacts later years is only the beginning.

Please watch for more information about the new GPRA measure and objectives related to breastfeeding. Specific information will be available soon at the IHS MCH breastfeeding website, [www.ihs.gov/MedicalPrograms/MCH/M/bf.cfm](http://www.ihs.gov/MedicalPrograms/MCH/M/bf.cfm).

### **International Health Update: Claire Wendland, Madison, WI Anthropology In The Clinic: The Problem Of Cultural Competency And How To Fix It**

The article I’ve chosen to review this month is not specifically about international health. Instead, it’s a relevant piece for anyone working in cross-cultural settings – or perhaps any clinical settings at all – abroad or at home. Arthur Kleinman, the lead author, is a well known medical anthropologist whose pioneering work on cultural variation and “explanatory models” of disease was adapted into many medical and nursing school curricula. In an article in last month’s *PLoS Medicine*, he critiques current models of “cultural competency” and suggests alternatives for high-quality, culturally sensitive clinical care.

So what’s wrong with the cultural competency model? Kleinman and his co-author Benson see several problems. First, no rigorous research shows it to improve clinical care, although training programs have been widely implemented. Second – and to the authors clearly more seriously – “culture” itself becomes another area of technical skill for the clinician, rather than the lived experience in which we (just as much as our patients) are immersed. This approach allows us to overlook the culture of biomedicine and its powerful effect on our interactions with patients. Instead, culture becomes something that belongs to other people, and that can be reduced to a bullet-point list of typical traits, dos and don’ts, or barriers to care. Patients on the receiving end of this approach, the authors note, may feel intruded upon, stereotyped, or stigmatized. Finally, as the authors illustrate through several case examples, cultural features are simply not always central to clinical problems of “compliance” or communication. Family issues, personal concerns, and economic constraints may be much more salient in any given situation.

The article is strong on the critique of cultural competency models, and articulates succinctly several concerns that have been corridor talk in medical and anthropological circles for some time. Where it is less strong is in the matter of pragmatic



solutions. Kleinman and Benson agree that clinicians should try to be sensitive to culture, and suggest that we attempt to see culture from a more anthropological perspective: as a way of experiencing and interpreting the world that is flexible, dynamic, and often highly variable among individuals, rather than static and wholly predictable on the basis of ethnic group memberships. This anthropological view should allow clinicians to determine what is at stake for any given patient in the course of illness and its treatment. To this end, they develop a six-step model for eliciting patients' experience (what they call a mini-ethnography) that simply seems to me impractical for the busy clinic setting in which most of us work. Perhaps it might be usefully adapted for more prolonged encounters or problem cases? Take a look and see what you think; you can find the article at [www.plosmedicine.org](http://www.plosmedicine.org).

Kleinman A, Benson P. Anthropology in the clinic: the problem of cultural competency and how to fix it. *PLoS Medicine*. October 2006;3(10):e294.

### **Medical Mystery Tour The Words 'Bizarre' and 'Atypia' in the Same Pathology Report Sentence...Hmmm....**

To recap, we discussed a 53 yo G6P5015 who presented to a field facility with ongoing menometrorrhagia despite conservative therapy with medroxyprogesterone 10 mg for 10 days a month for three months. Initial ultrasound revealed a 2.7 x 2.4 cm endometrial structure felt to be consistent with an endometrial polyp or a leiomyoma. The patient subsequently received an uncomplicated total vaginal hysterectomy with a left salpingo-oophorectomy. The patient was discharged on the second post operative day.

The pathologists initially commented that evaluation revealed cytologic atypia present throughout the neoplasm that was of a degenerative and bizarre type. Occasional mitotic figures were identified. No tumor type necrosis was seen. The increased cellularity was felt to be somewhat increased over what one normally sees in a highly cellular leiomyoma. The pathologic material was sent to a second facility for pathologic re-evaluation and the above impression was confirmed.

What did you think this patient's diagnosis was? The second pathologic evaluation revealed submucosal atypical leiomyoma with features of symplastic leiomyoma, benign . . . deeply penetrating adenomyosis. There was a comment that it was a symplastic leiomyoma, rather than a leiomyosarcoma. It was unusually cellular for this entity, prompting the staff to qualify it as an atypical symplastic leiomyoma, but it is placed in a benign category. The term atypia underlined the need for follow-up.

So, what is a symplastic leiomyoma? The term symplastic just refers to pleomorphic, atypical, or bizarre leiomyomas that have a wider range of morphologic changes and mitotic activity than previously documented. Grossly, nothing typically distinguishes a symplastic leiomyoma from the usual type of leiomyoma. Microscopically, there are foci of bizarre and pleomorphic tumor cells with atypical nuclei.

This smooth-muscle tumor is defined by the presence of variable numbers of smooth-muscle cells with multiple, gigantic nuclei with abundant nuclear chromatin in an otherwise typical leiomyoma. Mitotic figures are often lacking, but up to 7 per 10 hpf have been reported. They are, however, never atypical.

What is the risk of recurrence? All symplastic leiomyomas are benign. The recognition of this leiomyoma variant is critical, as the marked nuclear atypia can lead to an incorrect diagnosis of leiomyosarcoma. These lesions have a high cure rate with surgery alone (only one of 46 patients failed in the Stanford series) and are considered a variant of the usual (benign) leiomyoma.

If your learning curve isn't steep enough at this point, then I just want to add this common sense truism: "the third time is the charm." I was a little uneasy about the words, "The atypia just underlines the need for follow-up," because it was not clear what other follow-up might be needed for a benign lesion, so I requested the slides be sent to a third center for evaluation. The third center's preliminary diagnosis is leiomyosarcoma and at this time the patient is being notified to return for computerized tomography of the chest, abdomen, and pelvis.

The median age for women with leiomyosarcoma (43 - 53 years) is somewhat lower than that for other uterine sarcomas, and premenopausal patients have a better chance of survival. The recurrence rate is based on the amount of mitotic activity: less than 5 mitotic figures per 10 high power fields is 98% 5 year survival; 5 - 10 MF/10HPF is unpredictable at 42%; and greater than 10 is poor at 15%. More background is available online.

Robboy SJ et al. Pathology and pathophysiology of uterine smooth-muscle tumors. *Environmental Health Perspectives Supplements*. Volume 108, Number S5, October 2000.

### **Midwives Corner: Lisa Allee, CNM, Chinle What Women Want**

*The Journal of Midwifery and Women's Health* September/October issue has two more wonderful qualitative research articles (see my review of another in the October CCC Corner). These two studies gather information about women's experience in early labor at home and their perceptions during pregnancy of what would be a good birthing experience. The sample sizes are small and the populations are specific, but the quotes ring with the universal experience of pregnant and birthing women. For example, Beebe's and Humphreys' interviews with nulliparous women included these:

"It's interesting because the contractions (that) were described to me in class, or the way I interpreted them, didn't feel the way I felt when I . . . it just felt more like cramps. I don't know, the two just didn't go together for me. They didn't feel the way I was expecting them to."

"My body was just moving me around."

"The only thing I worried about was going to the hospital maybe too soon . . . I just thought it would be bad if we get there only to be told to go back home; it would be discouraging."

Melender's interviews produced these quotes about staff:  
"Of course I wish that . . . mmmhh . . . the midwife would be a caring person who sees the patient as a human being and not just a patient . . . takes her character into account."  
"That the midwife would be a person who listens to you . . . and not such a difficult one (and describing what she meant by difficult) well, if for example, I ask for something, she won't do it or if I ask for something, she'll snap at me . . . I mean that the atmosphere shouldn't be in any way tense or like that . . . I mean that the midwife and obstetrician should be nice."

These articles remind us to tune into what women are experiencing and wanting. Beebe and Humphreys encourage us to be sensitive to what women are going through before they come in to hospital — their doubt about how to tell if they are in labor and the anxiety about and disappointment in finding out that they are not in active labor. This should inspire us to teach as clearly as possible what early and active labor are like and to be readily available to provide reassurance, guidance, support, and encouragement over the phone and during labor checks. Melender's article reminds us of the importance of our relationship with women in labor, for example, being kind, nice, welcoming, empathetic, and accepting of her as she is, and how we can create an atmosphere conducive to birthing by including things like an unhurried atmosphere, normality, and security.

Beebe K, Humphreys J. Expectations, perceptions, and management of labor in nulliparas prior to hospitalization, *J Midwifery Women's Health*. 2006 Sep-Oct;51(5):347-53.

Melender HL. What constitutes a good childbirth? A qualitative study of pregnant Finnish women. *J Midwifery Women's Health*. 2006 Sep-Oct;51(5):331-9.

#### **From Zelda Collett-Paule, CNM, ANMC Delayed Cord Clamping: Benefits In Settings With High Levels Of Neonatal Anemia**

*Methods:* This was a randomized, controlled trial performed in two obstetrical units in Argentina on neonates born at term without complications to mothers with uneventful pregnancies.

*Conclusions:* Delayed cord clamping at birth increases neonatal mean venous hematocrit within a physiologic range. Neither significant differences nor harmful effects were observed among groups. Furthermore, this intervention seems to reduce the rate of neonatal anemia. This practice has been shown to be safe and should be implemented to increase neonatal iron storage at birth.

Ceriani Cernadas JM et al. The effect of timing of cord clamping on neonatal venous hematocrit values and clinical outcome at term: a randomized, controlled trial. *Pediatrics*. 2006 Apr;117(4)

Here is an excerpt from the Cochrane Review in preterm infants. Authors' conclusions: delaying cord clamping by 30 to 120 seconds, rather than early clamping, seems to be associated

with less need for transfusion and less intraventricular haemorrhage. There are no clear differences in other outcomes.

#### **OB/GYN CCC Editorial comment**

Use caution when fixing a problem that is not broken. Luckily the days of significant problems with neonatal anemia among AI/AN are in the past. I say this because that era was also associated morbidity and mortality rates that approached those still seen in the lowest resource, developing countries today. Hence, for those of you who work in developing countries, Cernadas et al adds a randomized controlled trial to the growing literature that had previously been reported in preterm infants. Currently in AI/AN we are more likely to see problems associated with polycythemia, than widespread neonatal anemia.

The key will be to rationally apply this practice in a setting where neonatal anemia does not exist because delayed cord clamping can be associated with these adverse effects according to the NeoReview below: grunting, tachypnea, cyanosis, plethora, apnea, neurologic depression, cardiomegaly, pulmonary congestion, edema, pleural effusion, irritability.

One would need a good indication to set up an AI/AN term infant for the exchange transfusions and NICU admission to treat hyperviscosity syndrome. There are indications for exposing term infants to that risk in those areas of the developing world where early infant anemia is a public health problem, just not in Indian Country at this time. More background online.

Phillip AG et al. When should we clamp the umbilical cord? *NeoReviews*. Vol.5 No.4 2004 e142

#### **Navajo News: Jean Howe, Chinle Prevalence of Diabetes: Diagnosed Diabetes Among AI/AN Aged <35 Years**

This report was based on a CDC analysis of IHS data and revealed that the age-adjusted prevalence of diabetes among (AI/AN) aged <35 increased from 8.5 to 17.1 per 1000 among the 60% of AI/AN who use IHS facilities for care. The analysis also indicated that the number of AI/AN aged <35 with diabetes diagnosed by IHS more than doubled in the decade under study (from 6,001 in 1994 to 12,313 in 2004). Importantly, the annual percentage change (APC) of diagnosed diabetes was greatest among females aged 25-34 years of age (9.1%).

The accompanying discussion notes that this dramatic increase could be due to an increased incidence of diabetes or increased screening for diabetes or both. As the editor points out, the extraordinary increase in diabetes in reproductive age women is especially concerning as the offspring of women with diabetes are at increased risk for having diabetes themselves as well as for congenital anomalies and perinatal morbidity and mortality. The long-term health consequences of early-onset diabetes are particularly daunting. *MMWR*. November 10, 2006; 55(44):1201-1203.

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**Nurses Corner, Sandra Haldane, HQE**  
**Exclusively for Nurses: IHS has a Biomedical Librarian/Informationist dedicated to I/T/U**

The IHS has a clinical biomedical librarian/informationist dedicated to IHS (I/T/U) nursing staff. Judith Welsh, RN, MLS is available via e-mail on the global or per her contact phone below to assist nurses with literature searches or other NIH Library information needs. The IHS pays the NIH Library yearly for the support of informationists, so please take advantage of their assistance. If you do a literature search and find that you need document retrieval because the library does not carry the document, inter-library loans and retrieval are free of charge to you. Please go to Judith's link below to access the NIH Library for searching, and please call or e-mail Judith should you require any assistance. She will walk you through searches if need be, and, believe me, she knows the in's and out's of searching the various databases.

Judith Welsh, RN, MLS, [welshju@ors.od.nih.gov](mailto:welshju@ors.od.nih.gov); Health Services Research Library, telephone (301) 594-6211.

**Oklahoma Perspective**  
**Greggory Woitte, Hastings Indian Medical Center**  
**Preoperative Evaluation**

As we often deal with very healthy patients in our specialty, it is good to remind ourselves that surgery, even in healthy patients, can have serious consequences. Fortunately, the majority of the time, healthy patients have very uneventful surgical procedures, but occasionally what we perceive as a healthy patient may have risk factors that may cause us to take additional precautions prior to surgery. A preoperative questionnaire can identify those at risk and can be as useful as a detailed history and physical. A modified questionnaire:

- Do you feel unwell?
- Have you ever had any serious illnesses in the past?
- Do you get any more short of breath on exertions than other people of your age?
- Do you have any coughing?
- Do you have any wheezing?
- Do you have any chest pain on exertion (anginal type)?
- Do you have any ankle swelling?
- Have you taken any medicine or pills in the last 3 months, including excess alcohol?
- Have you any allergies?
- Have you had an anesthetic in the last 2 months?
- Have you or your relatives had any problems with a previous anesthetic?
- Observation of serious abnormality from "end of bed" which might affect anesthetic?
- What is the date of your last menstrual period?

Recommended lab tests for the preoperative evaluation of the healthy patient include:

- Pregnancy test
- Hematocrit, for surgery with expected major blood loss
- Serum creatinine if major surgery, hypotension expected,

nephrotoxic drugs to be used, or age >50 years

Other lab tests such as LFTs, routine U/A, blood glucose have little, if any, predictive value of pre- or postoperative performance.

EKGs should be obtained (within 1 month of surgery) on:

all women >55 years

known cardiac disease

clinic evaluation suggestive of cardiac disease, patient at risk of electrolyte abnormality, or systemic disease associated with possible unrecognized heart disease (DM or HTN)

Chest x-ray (within 6 months of surgery) for patients over 60 years or those with suspected cardiac or pulmonary disease.

Adapted from Wilson, ME, Williams, MB, Baskett, PJ, et al. *Br Med J*. 1980;1:509.

**Perinatology Picks George Gilson, MFM, ANMC**  
**Be Prepared: The Boy Scout motto...er...the Maternity Care Provider motto, too**

*Conclusion:* These data demonstrate that most emergent cesarean deliveries develop during labor in low-risk women and cannot be anticipated by prelabor factors. The outcomes demonstrate that infants are at risk in these clinical situations and suggest that strategies to improve performance in these clinical situations are important.

Lagrew DC, et al. Emergent (crash) cesarean delivery: indications and outcomes. *Am J Obstet Gynecol*. 2006 Jun;194(6):1638-43; discussion 1643.

**Editorial comment: George Gilson, MFM, ANMC**  
**Emergency drills are a good thing for your L/D team, and for your JCAHO accreditation**

Our system expends a large amount of time and effort on ACLS and NRP that maternity care providers infrequently apply, yet 1:159 deliveries is a "crash section" that we aren't prepared for, and subsequent neonatal outcomes are often poor. Lagrew DC, et al, above, review the new "15 minute rule," skipping asepsis, Foley, importance of the clinical team 'in house,' arguing that only 13% of them were associated with VBAC attempts despite the disproportionately strict VBAC recommendations from our professional organizations, the need for staff drills for cord prolapse, etc. This is a lot of practical information for small and large facilities. The Advanced Life Support in Obstetrics (ALSO) model could be helpful if applied in this setting.

**Adverse neonatal outcomes associated with antenatal dexamethasone vs betamethasone**

*Conclusions:* Betamethasone was associated with a reduced risk for neonatal death, with trends of decreased risk for other adverse neonatal outcomes, compared with dexamethasone. It may be in the best interest of neonates to receive betamethasone rather than dexamethasone when available.

Lee BH, et al. Adverse neonatal outcomes associated with antenatal dexamethasone versus antenatal betamethasone. *Pediatrics*. 2006 May;117(5):1503-10.



## STD Corner

### Lori de Ravello, National IHS STD Program IHS Consent Form for an HIV Antibody Test is Hereby Cancelled

On September 22, 2006, the Center for Disease Control (CDC) issued revised recommendations for HIV testing of adults, adolescents, and pregnant women in health care settings. The recommendations for patients in all health care setting is that a separate written consent for HIV testing should not be required; general consent for medical care should be considered sufficient to encompass consent for HIV testing. To remove any barriers in implementing the CDC recommendations, IHS Form 509 (Notice of HIV Antibody Test Information and Authorization For HIV Antibody Test), previously required by the IHS as a separate and specific patient consent form for an HIV antibody test, is hereby cancelled and no longer recommended. If a facility chooses to implement these recommendations and is within state guidelines, patients still must be informed orally or in writing (and documented) that HIV testing will take place – unless they decline the test (opt-out screening). Cancellation of Form 509 does not mean IHS mandates full implementation of CDC recommendations. Rather, it has removed an existing form that may create a barrier within IHS to implementing more streamlined processes for HIV testing. Depending upon individual state guidelines and relationships, local facilities may choose to fully or partially implement all or some of CDC recommendations. More time is needed this year to assess how these recommendations are adopted at the state level and how CDC will identify and manage implementation barriers and challenges.

If you should have questions regarding the CDC recommendations and/or IHS policy and guidelines on HIV testing, please contact CDR Scott Giberson, National IHS HIV/AIDS Principal Consultant by phone at (301) 443-4644 or by e-mail at [Scott.Giberson@ihs.gov](mailto:Scott.Giberson@ihs.gov).

### Adapting condoms to community values in Native American communities: Snag bags

HIV/AIDS researchers working among Native Americans have consistently noted resistance to discussions of sexuality and the distribution of condoms. This resistance is inspired by long held values about shame and public discussions of sexuality. Also, American Indians have been reluctant to welcome public discussions of HIV/AIDS and sexuality from external entities, such as governmental agencies. As a result, Native peoples have some of the lowest documented condom use rates. However, innovations in culturally integrating condoms and safe sex messages into Native cultural ideals are proving beneficial. One such innovation is the snag bag, which incorporates popular Native sexual ideology while working within local ideals of shame to distribute condoms and safe sex materials to sexually active young people and adults. Using snag bags as an example, this research proposes that an effective approach to HIV prevention among Native peoples is not cultural sensitivity but cultural integration. That is, HIV prevention strategies must move beyond the empty promise of merely culturally-sensitizing ideas about disease cause. Instead of simply ‘translating’ HIV/AIDS programming into

Native culture, prevention strategies must be integrated by Native peoples into their own disease theories.

Gilley BJ. ‘Snag bags’: Adapting condoms to community values in Native American communities. *Cult Health Sex.* 2006 Nov-Dec;8(6):559-70.

## Barbara Stillwater

### Alaska State Diabetes Program

#### Gestational diabetes linked to high prevalence of periodontal disease

**Results:** In pregnant women, the prevalence of periodontitis was 44.8% in women with GDM and 13.2% in nondiabetic women, with adjusted odds ratio (aOR) of 9.11 (95% confidence interval [CI] 1.11-74.9). In nonpregnant women, the prevalence of periodontitis was 40.3% in women with type 1 or 2 diabetes, 25.0% in women with previous history of GDM, and 13.9% in nondiabetic women, with aOR of 2.76 (1.03-7.35) for women with type 1 or 2 diabetes. **Conclusion:** We found an association between periodontal disease and GDM.

## Editorial comment

### Todd Smith, DDS, MSD, IHS Periodontal Consultant

It is not surprising that there was a significant, positive association between periodontitis and GDM. Both pregnancy and diabetes are associated with increased inflammation in the gums and tissues surrounding the teeth. The same microvascular changes occurring throughout the body in patients with diabetes (i.e., formation of advanced glycation end products, increased cross linking of collagen, and accumulation in blood vessel walls, vascular smooth muscle proliferation with narrowing of the lumen, poor oxygenation and perfusion) occurs in the periodontal tissues. Taylor (2004) reported in a review of 55 studies involving subjects with diabetes that there was consistent evidence of greater periodontitis prevalence, incidence, severity, and progression. This relationship appears to be bidirectional, with the chronic, gram negative anaerobic infection of periodontitis perpetuating a systemic inflammatory state with a resultant increase in insulin resistance and aggravation of glycemic control. This is supported in treatment studies where treatment of periodontitis has been associated with significant drops in HbA1c.

The same may be true for pregnancy and periodontitis. The systemic inflammation associated with periodontitis, with bacteremia and increases in PGE<sub>2</sub>, TNF-, IL-1 and -6, and CRP, has been associated with adverse pregnancy outcomes such as PTB, LBW, and preeclampsia (Offenbacher, Jeffcoat, Boggess, Radnai, and others). Some studies have demonstrated a decrease in prevalence of adverse pregnancy outcomes with periodontal therapy during the second trimester; the most recent article in the *NEJM* did not. A larger multicenter periodontal treatment study with 1800 patients is ongoing and due to be published within two years. In the meantime, if your patients are having trouble controlling their blood sugar, or are pregnant, look in their mouths to see how healthy the gums look. Expectant mothers should be counseled on the importance of oral health, and referral to a dentist is strongly recommended.

Xiong X, et al. Periodontal disease and gestational diabetes mellitus. *Am J Obstet Gynecol.* 2006 Oct;195(4):1086-9.

Other references online.



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

## IHS Child Health Notes

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### Quote of the month

“I’ve had a perfectly wonderful evening. But this wasn’t it.”

Groucho Marx

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### Article of Interest

Diagnosis and management of bronchiolitis. *Pediatrics*. 2006 Oct;118(4):1774-93. <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?CMD=search&DB=pubmed>

Lower respiratory tract infections among American Indian and Alaska Native children and the general population of U.S. Children. *Pediatr Infect Dis J*. 2005 Apr;24(4):342-51. <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?CMD=search&DB=pubmed>

Respiratory season will begin sometime in December and resolve by March. Each year hospitals and clinics are swamped with wheezing and coughing infants. Dr. Singleton’s article demonstrates what we all have felt each winter: the burden of respiratory illnesses is greater for AI/AN children than the general US population.

The bronchiolitis guidelines in *Pediatrics* are an evidenced-based summary of what we know and what works. The bottom line is that usually “less is more.” Fewer tests, fewer radiographs, fewer oximeters, fewer antibiotics, and fewer nebulizer treatments would benefit our patients. More clinical judgment would help to decide whom to admit and whom to discharge. Read both articles as you get ready for the onslaught of winter.

### Infectious Disease Updates.

Rosalyn Singleton, MD, MPH

#### Does in-home water service reduce the risk of infectious disease?

A cornerstone of health improvements in the United States during the past century has been modern sanitation services, such as safe drinking water and wastewater disposal services. Nowhere has the effort to bring sanitation to homes been more difficult than in remote Alaskan villages. In 2000, only 77% of Alaskan homes had in-home running water and flush toilets. We compared disease rates from the IHS/tribal hospital discharge data for Alaska Natives (fiscal years 2000 - 2004) to the water service level as determined from the Rural Alaska Housing Sanitation Inventory (July 2002 - April 2004). Hospitalization rates were substantially higher in low service regions compared to those in high service regions for RSV (risk

ratio [RR] 3.4, 95% confidence interval [CI] 2.95-3.8), pneumonia/influenza (RR 2.5, 95% CI 2.4-2.7), skin infection (RR 1.9, 95% CI 1.8-2.1), and MRSA infection (RR 4.5, 95% CI 3.6-5.7). Hospitalization rates for infectious diarrhea did not differ significantly with availability of in-home water service.

Safe drinking water (available to all Alaskan communities) may be the intervention of greatest significance for control of diarrheal disease. However, for respiratory and skin infections, where hygienic measures such as hand washing are important means for preventing person-to-person spread, lack of piped in-home water service likely contributes to transmission of disease.

Acknowledgements: These data were developed by Tom Hennessy MD, Arctic Investigations Program, Centers for Disease Control and Prevention, Anchorage, AK; Troy Ritter, MPH, Environmental Health Consultant, Alaska Native Tribal Health Consortium, and Robert Holman MS, DVRD, Centers for Disease Control and Prevention, Atlanta.

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

#### Doug Esposito, MD

Home-visiting intervention to improve child care among American Indian adolescent mothers: a randomized trial. *Arch Pediatr Adolesc Med*. 2006 Nov;160(11):1101-7.

[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list\\_uids=17088511&query\\_hl=1&itool=pubmed\\_DocSum](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=17088511&query_hl=1&itool=pubmed_DocSum)

The authors report the short-term impact of a paraprofessional-delivered home-visitation program targeting Navajo and White Mountain Apache teen mothers. The primary outcomes investigated are maternal knowledge, skills, and involvement in child care. Also assessed are several secondary outcomes that pertain to psychological and behavioral risks that could negatively influence successful child rearing (family conflict and cohesion, social support, self esteem, locus of control, and drug use).

Enrolled participants were randomized to intervention or control groups. The family-strengthening home-visitation intervention was modeled after “Healthy Families America” ([http://www.healthyfamiliesamerica.org/network\\_resources/training.shtml](http://www.healthyfamiliesamerica.org/network_resources/training.shtml)). The content of the intervention curriculum was based on the *AAP Guide to Baby Care: Caring for your Baby and Young Child: Birth to Age 5* and information contributed by the community regarding what teen moms needed to know to be

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successful parents. Twenty five home visits lasting about 1.5 hours each were scheduled during which 41 lessons were presented, starting at 28 weeks gestation and ending six months post-partum. The control group was provided with breastfeeding education only. Twenty three visits lasting about 1 to 1.5 hours each were scheduled during which 20 breastfeeding lessons were taught. The educational content of both the intervention group and the control group was made culturally relevant.

The educators were bilingual, highly-trained, well-supervised American Indian women from the community. All were either former teen mothers or had a demonstrated interest in the target population. Outcomes were assessed through self-reports and knowledge/skills tests administered at baseline ( $\leq 28$  weeks gestation) and at two and six months post-partum.

The authors state that “this is the first published randomized trial assessing the impact of a family-strengthening home-visiting intervention on American Indian pregnant teens as a target population.” The only outcome found to be significantly different between intervention and control groups was a higher average knowledge score at two and six months post-partum in the intervention group. The authors state that although not proven, increased knowledge in mothers could lead to increased effectiveness in parenting, and better outcomes. The intervention group may also have reduced depression risk, but this could not be definitively concluded due to study limitations.

Fortunately, a larger, more comprehensive randomized controlled trial of this intervention is currently underway. We hope we will soon know more definitively if this paraprofessional-delivered family-strengthening home visiting model is an effective way to improve the health and health behaviors of American Indian teen mothers and their children.

### **Editorial Comment**

Nurse-delivered home-visiting interventions, although proven effective, are resource and time intensive. In the Olds interventions (see links listed below) one nurse typically followed approximately 25 families, with services being delivered to each family for two years. Although wonderful and necessary programs, it is unlikely that the IHS could integrate such a model into its system of prevention in a sustainable manner given current budgetary restrictions, the status of the national nursing shortage, and Agency-specific difficulties in recruitment and retention of qualified nurse professionals. Paraprofessional-delivered home-visiting interventions hold promise as a more cost-effective alternative to these nurse-delivered interventions, if ultimately proven effective.

Although a public health nurse (PHN) is uniquely qualified to deliver population-based preventive health services out in the community, these valuable skills are often untapped in the IHS. PHN time and energy are typically diverted away from public health practice and focused more on the provision of direct medical care in the field, typically functioning as an extension of clinical or hospital care. In their

current practice environment, the IHS PHN might be more aptly titled “field health nurse”; sort of a jack-of-all-trades in the out-of-hospital setting. In my opinion, this is an inefficient use of their specialized skill-set and represents a situation in desperate need of attention.

Over the last several decades, we have witnessed a dramatic transformation in the nature of the health problems facing Native Americans. Preventable chronic diseases, injuries (both intentional and unintentional), and behavior-related maladies have replaced acute infectious diseases as the most pressing health problems facing AI/AN populations and their health systems. Much more community-based public health prevention is needed in the IHS if we ever hope to stem the tide of this concerning trend in chronic disease.

Over the same time frame, we have seen an explosion in the complexity of medical diagnostics and therapeutics, demanding a reflexive increase in the specialization of clinical services. Although still a little behind, the IHS has generally been able to keep pace with advances in medical care that are delivered within the confines of its hospitals and clinics, a true study in thrift. Unfortunately, the same cannot be said of clinical nursing services delivered in the field, especially in rural IHS settings where developed systems of home health are essentially nonexistent. Although not their forte, PHN departments struggle to meet this demand, further taxing their capacity to provide much-needed preventive public health services.

I believe it is time for the IHS to completely rethink and reengineer its PHN program. “Field health” is begging to be divided into two corps of highly skilled nurse professionals: home health nursing and public health nursing. Such a change would allow for the provision of skilled nursing care outside of the clinic or hospital setting while simultaneously providing an opportunity for the PHN to focus on public health practice and prevention and the development of a more robust public health infrastructure.

If you are finding yourself wondering how this all relates to the subject at hand (paraprofessional-delivered home-visiting interventions, remember?), please read on. As previously stated, the mere expansion of PHN duties and functions to accommodate the implementation of targeted home-visiting interventions is not currently feasible. However, if the above restructuring were to occur, I believe that community health programs could be organized into coordinated, comprehensive community health teams. These teams would consist of a PHN, a home health nNurse, and a variety of specifically trained paraprofessionals. These teams would have the capacity to deliver services and programs designed to meet the defined needs of individual populations and communities. Suicide prevention, pedestrian and motor vehicle occupant safety, diabetes, adolescent pregnancy, whatever the community would choose to target as its biggest problems, would be fair game. And, the home health services and field medical care would be expertly delivered, too. Perhaps social workers, mental health workers, nurse practitioners, and even physicians could be integrated into this system for added breadth and functionality.

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The authors of the study under review give us hope that a new evidence-based approach utilizing paraprofessionals might be on the horizon as a viable option within our Indian health system. If ultimately shown to be an effective model, will the IHS be able to create something truly innovative and perhaps even revolutionary? Our 50-year history is marked by extraordinary achievement, even against the greatest of technical and political odds. The IHS has a long and storied history of innovation; one that I anticipate will endure the challenges of our times.

#### Additional Reading

Home visiting by paraprofessionals and by nurses: a randomized, controlled trial. *Pediatrics*. 2002 Sep;110(3):486-96. [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list\\_uids=12205249&query\\_hl=8&itool=pubmed\\_docsum](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=12205249&query_hl=8&itool=pubmed_docsum)

Effects of home visits by paraprofessionals and by nurses: age 4 follow-up results of a randomized trial. *Pediatrics*. 2004 Dec;114(6):1560-8. [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list\\_uids=15574615&query\\_hl=8&itool=pubmed\\_docsum](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=15574615&query_hl=8&itool=pubmed_docsum)

#### Article

Forty years in partnership: the American Academy of Pediatrics and the Indian Health Service. *Pediatrics*. 2006

Oct;118(4):e1257-63. [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list\\_uids=17015514&query\\_hl=1&itool=pubmed\\_DocSum](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=17015514&query_hl=1&itool=pubmed_DocSum)

#### Editorial Comment

This article is “required reading” for all health care worker interacting with American Indian/Alaska Native children. Unfortunately, it is concealed within the “e-pages” of the October issue of *Pediatrics*. I highly recommend everyone read this important paper chronicling the 40+ year history of commitment, contribution, and collaboration between the AAP and the Indian Health Service, tribal, and urban health programs in the advancement of the health status of one of this country’s most vulnerable yet resilient populations.

#### Locums Tenens and Job Opportunities

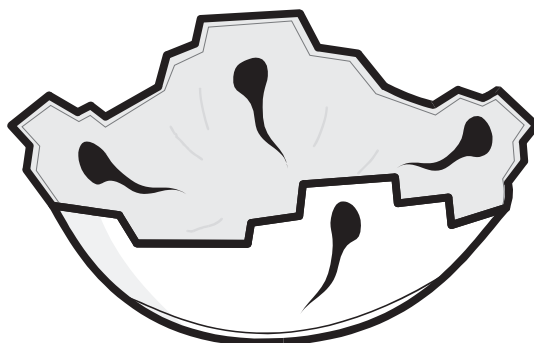
If you have a short or long term opportunity in an IHS, tribal or urban facility that you’d like for us to publicize (i.e., AAP website or complimentary ad on Ped Jobs, the official AAP on-line job board), please forward the information to [indianhealth@aap.org](mailto:indianhealth@aap.org) or complete the on-line locum tenens form at <http://www.aap.org/nach/locumtenens.htm>.

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## The 11th Annual Elders Issue

The May 2006 issue of THE IHS PROVIDER, to be published on the occasion of National Older Americans Month, will be the eleventh annual issue dedicated to our elders. Indian Health Service, tribal, and Urban Program professionals are encouraged to submit articles for this issue on elders and their health and health care. We are also interested in articles written

by Indian elders themselves giving their perspective on health and health care issues. Inquiries or submissions can be addressed to the attention of the editor at the address on the back page of this issue.



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

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