



The Great Lakes EpiCenter News

Epidemiology Project through Great Lakes Inter-Tribal Council, Inc.

Summer, 2001

The EpiCenter currently provides epidemiological services to the Tribes in the Bemidji Area (Michigan, Wisconsin, and Minnesota). Funded in part by the Indian Health Service, the EpiCenter strives to be responsive to the health information and epidemiological needs of the Tribes in the region by providing training and technical assistance in many areas of public health, data management, program planning, and program evaluation.

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Got Health? . . . It's Up to Youth!!!

by Denise Marth

Research indicates that diet is a primary contributing factor to preventable mortality. It plays a pivotal role in increasing the relative risk for such health conditions as Type II diabetes, insulin resistance, obesity, and hypertension. National trends indicate an alarming increase in the diagnosis of obesity and diabetes in youth at much earlier ages than previously thought. But who is passing this valuable health information onto youth? According to the findings from the Baraga County Youth Health Survey, there appears to be a serious lack of awareness of the strong relationship between dietary/activity patterns and the development of chronic disease.

The Survey, conducted in 2000 by the Keweenaw Bay Indian Community, Northern Michigan University, and the Great Lakes EpiCenter, questioned 555 middle and high school students in Baraga County, Michigan, on their health knowledge, attitudes, and practices. Although there was a primary interest in American Indian students, students of all races were included; Native American students accounted for 113 (21%) of the respondents. Providing the survey to the entire youth community permitted comparative opportunities and unity within the group.

Results from the Survey showed

over half of the females surveyed were not satisfied with their weight compared to about thirty percent of the male. The dissatisfied females tended toward wanting to be lighter while the males wanted to be heavier. When the responses were compared to the student's Body Mass Index (BMI; weight in kg/squared height in meters), it was found that over half of those who tended toward being underweight (BMI<20) wanted to be even lighter. In contrast, among those who were considered overweight (BMI>25), just over 20% wanted to be heavier. Although BMI is not as accurate a measure for youth, this does give insight into issues of body self-image in the surveyed group.

When asked about the relationship of weight to health, 46% believed being under-/overweight did not affect health, with 19% being unsure. 59% did associate being overweight with an increased risk of heart disease, but 57% did not associate diabetes with obesity. 36%

associated being underweight with being popular.

When asked about dietary behavior, females were more likely to have less than three meals a day while males were more likely have more. The majority of females also reported they were trying to lose weight while the majority of boys reported they were not. The most common method of losing weight was exercise (71%), followed by avoiding fats (49%) and sweets (38%) and skipping meals (36%). 59% reported eating fast food less than once a week.

When asked about physical activity, 67% indicated they participated in some type of activity at least five times a

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Diabetes Data Collection Survey, April 2001

In April 2001, Diabetes Coordinators in Illinois, Michigan, Minnesota, and Wisconsin were sent a survey asking about data collection at their local diabetes programs. Surveys were sent to Tribal and Urban diabetes programs. Twenty-seven of 38 surveys were completed and returned (71%). Thirty-seven percent of completed surveys were from Minnesota, 26% from Michigan, and 33% from Wisconsin, and 4% from Illinois (1 survey from Chicago Urban diabetes program). The following is a summary of the diabetes survey results.

Tracking Childhood Obesity
Fifty-six percent of respondents reported that they collect data on the number of children 2-3, 4-6, and 13-15 years old who are obese. The methods cited for collecting childhood obesity data vary but fall into 6 main categories:

- 40% collect childhood obesity data at health fairs
- 47% schools and Head Start
- 47% clinic visits
- 20% Women Infants and Children (WIC program)
- 7% summer camp
- 7% outreach activities

Discussion

Most diabetes programs in the Bemidji Area are tracking complications due to diabetes. Of those tracking complications, most are using RPMS as the means of tracking. For programs tracking complications, it would be interesting to know if all programs are using the same ICD-9 codes or CPT codes as definitions to determine whether an individual has a complication due to diabetes. For example, is retinopathy being tracked by the CPT code for laser eye surgery, or the diagnosis code for diabetic retinopathy, and are these codes consistently used across all diabetes programs in the Bemidji Area.

Childhood obesity is a more difficult measure to track. Some programs indicated that they are working with WIC and Head Start programs where children's height and weight are already collected. Some respondents noted that they work with the schools to collect health information on children. Every diabetes program has unique barriers and opportunities to collecting childhood obesity data and because of this, it is especially important for programs to share information about how they capture childhood obesity data.

A large variety of responses regarding blood sugar screening criteria requiring follow-up were noted. It is suggested that the ADA criteria be considered (i.e. FBS of 110 mg/dl and RBS 140 mg/dl).

Table 1. Tracking Complications of Diabetes

Complication	Percent Tracking	Of those tracking, percent using...			
		RPMS	Paper File	Another Computer Program	Other Means of Tracking
Amputation	70	68	26	4	16
Dialysis	67	56	22	11	18
Laser Eye Treatment	52	50	36	7	14

Table 2. Age Screening Begins

First Screening	Responses
Less than 18 years	48%
18-25 years	26%
25 years and older	4%
Any or all ages	11%
High-Risk children only	4%
No community screening	7%

Diabetes Chart Audits
Eighty-one percent of respondents reported completing a chart audit for their project during FY2000.

Community Screening
Many diabetes programs conduct health screenings in their communities to identify people at risk for or with diabetes.

When asked what level of screening test results require follow-up, there was a wide range of values cited. The range for random blood sugar (RBS) follow-up ranged from greater than 110 mg/dl, to greater than 200 mg/dl (65% answered within this range). Regarding the range for follow-up of fasting blood sugar (FBS), 46% gave a range from greater than 110 mg/dl to greater than 150 mg/dl. Fifteen percent of respondents reported no answer or incomplete information.

When asked how often their diabetes program conducts community wide screening, the responses varied greatly.

Table 3. Frequency of Community-wide Screening

Frequency of screening	Responses
More than monthly	4%
Monthly	22%
Quarterly	22%
Twice a year	11%
Annually	15%
No regular schedule for screening	15%
Do not conduct screening or no response	11%

Do You Have Any RPMS Training Needs?

Dina George, MIS Analyst at the Great Lakes EpiCenter may be able to help. She is able to do one-on-one on-site and group training on various RPMS packages. Please feel free to contact Dina at 1-800-472-7207.

How Menominee Has Used the Community Health Profile

by Mark Caskey

Before the Great Lakes EpiCenter existed, data for Native American Tribes in Wisconsin on health, disease, death, and demographics were rare and in most cases non-existent. We used IHS regional data, CDC studies, county statistics, and local surveys. Most of this was “helicopter research” in which investigators arrived, collected data, and departed leaving the community with no idea of outcomes. From the beginning, the EpiCenter has returned data to Menominee in a meaningful way. Now we have data that is scientific, accurate, updated, and tribal specific.

The Tribal Community Health Profiles and specific data projects are crucial and essential tools if Native Americans are going to survive. Native American health programs are funded at 40% of what is needed. Data that the EpiCenter gathers and analyzes is needed to apply for grants and to prioritize problems. Grants are needed to fund programs and continued data analysis will determine if our interventions are working, for continued grant funding.

The community health profiles have been used in a variety of settings including schools, worksites, and in the community. The following are some of the different ways we have used the community health profiles.

- Data from disease and death from commercial tobacco related illnesses were used to apply for five different tobacco prevention and cessation grants received at Menominee.
- Data from the Menominee Elders Health Plan (facilitated by the EpiCenter) and the community health profile were used to acquire a grant which funded a two day Elder Health Summit.
- Data were used to apply for a youth prevention grant, funds were used for Menominee High School Wellness Day, including keynote speakers and wellness breakout sessions. Each year we use the data to focus on a high priority problem. For example, this year data showed that we had a high rate of chlamydia, so the

keynote speaker was a sexually transmitted disease specialist. Hours after her presentation, screening and treatment at the school nurses’ office and tribal clinic skyrocketed. Next year’s data will tell us more about the long term success of this intervention.

- Menominee College statistics and speech classes use community health profiles for projects, for wellness curriculum planning, and for grant applications.
- Every year Menominee upper elementary and high school students get a presentation called “If We Don’t Change, What Killed Our Grandparents Is Going to Kill Us!” which is a presentation of the Menominee Community Health Profile data. Students use this information to write essays and are awarded plaques for the top three in each school.

Building capacity...

- The EpiCenter has networked many groups and organizations with our Tribe. These include Health and Family Services, CDC, University of Wisconsin, Bureau of Health Information and other Tribes.
- EpiCenter epidemiologist Dawn McCusker has come to our clinic many times and installed and taught our staff how to use Epi Info and the Assessment Information Manager (AIM) program. I was able to use AIM for local health information and for a presentation on Milwaukee Native American Women’s Health for the Wisconsin Women’s Health Foundation.
- The clinic administrator provided the director of legislative staff a copy of the Menominee Community Health Profile per their request, because of repeated use of health information in local newspaper articles.

Until recently, data were reported back to Tribes by the press in articles only showing negative statistics about Native American people. In many cases it caused more harm than good and led a mistrust of researchers. Menominee people regard research and data in general as very serious and the growing spiritual, cultural, social, and political concerns regarding such research and publications. The data collected today may help us find more answers to the physiology of type 2 diabetes in native people. The EpiCenter project is health by the people that is supersensitive to native American people.

EpiCenter Services

Community Health Profiles

A major project every year here at the EpiCenter is updating the community health profiles for the Bemidji Area and each Tribe in Minnesota, Michigan and Wisconsin. The Community Health Profiles have been distributed and EpiCenter staff are available to consult with and discuss each Tribes’ community health profile with them.

Diabetes

The EpiCenter continues to provide diabetes program technical assistance to the Tribes in Wisconsin, Michigan, and Minnesota. Besides RPMS training and assistance with diabetes chart audits, the EpiCenter also assists with data analysis and reporting on other diabetes project related activities.

Special Project Assistance

The EpiCenter has recently been involved in assisting tribes with community surveys and surveillance. Some topic areas have included:

- Elders Issues
- Youth Nutrition
- Youth Tobacco Use
- Disabilities
- Childhood Obesity

Community surveys are an excellent way to measure baseline information and look at change within a community over time.

Violent Victimization and Native Americans

In March 2001, the US Department of Justice released their findings from the National Crime Victimization Survey. They found that between 1993 and 1998, American Indians and Alaska Natives (AI/AN) sustained the highest rate of violence per person; 110 victimizations per 1,000 AI/AN aged 12 or older. This rate of violent victimization was twice that of blacks, 2-1/2 times that of whites, and 4-1/2 times that of Asians. American Indians continued to have the highest rates among all racial groups regardless of age, gender, marital status, place of residence (urban/suburban/rural), annual household income, and home ownership.

The rate of overall victimization for AI/AN did not change significantly over the time period examined, whereas it declined slightly for all other races. The rate of serious violent crime (rape, robbery, aggravated assault) declined slightly for all races.

Males regardless of race were more often victimized by strangers than by non-strangers, and more by friends and acquaintances than by intimates (boyfriends, girlfriends, or current or former spouses) or other relatives. AI/AN male victims were more likely to report the offender to be a non-spousal relative than other races (9% vs. 1-3%).

Females of all races were victimized more

often by non-strangers than strangers, with friends and acquaintances being the largest percentage, followed by intimates and other relatives. AI/AN females were more likely to be victimized by friends and acquaintances than other races (47% vs. 36-37%) and less likely by strangers (24% vs. 33-45%).

American Indians were victimized by an intimate at a rate twice that of blacks, three times that of whites, and twelve times that of Asians. The percentage of violence by intimates reported for AI/AN was similar to that of whites and Asians (51%); blacks had the highest rate of reporting (66%). Reasons for not reporting were similar across all racial groups, with the leading reasons stated by the victims being "it was a personal matter" (34-36%), "feared reprisal" (19%), and "wanted to protect offender" (12-13%).

The perceived race of the offender for AI/AN victims was white (58%). Victimization by another AI/AN is not known since the data used combined AI/AN and Asians into "Other Race;" victimization by Other Race was 25%.

While all victims were more likely to be uninjured by the violence, more AI/AN were injured than other racial groups (35% vs. 23-29%), but these injuries

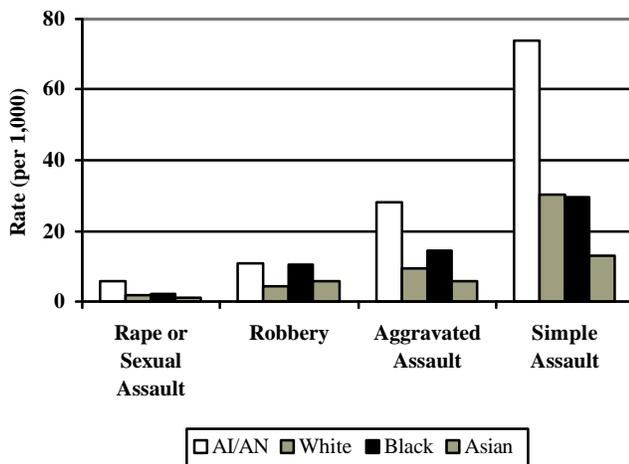
were more likely to be minor (27% vs. 18-22%). Percentage of serious injury (wounds, broken bones, internal injuries, rape) was higher for AI/AN and blacks than for whites and Asians (6-7% vs. 3%). Among injured victims, AI/AN and blacks were more likely to receive treatment than whites and Asians.

Among male victims, reporting violence was similar for all races (41-43%) while AI/AN and black females were more likely to report violence (52-53% vs. 41-45%). AI/AN victims did have a higher percentage of not reporting violence due to "police will not bother" (12% vs. 6-8%). Other reasons for not reporting were similar for all races; the primary reasons being (% for AI/AN) were that it was a "private or personal matter" (28%), it was minor and involved "no loss" (19%), or it was "reported to another official" (12%).

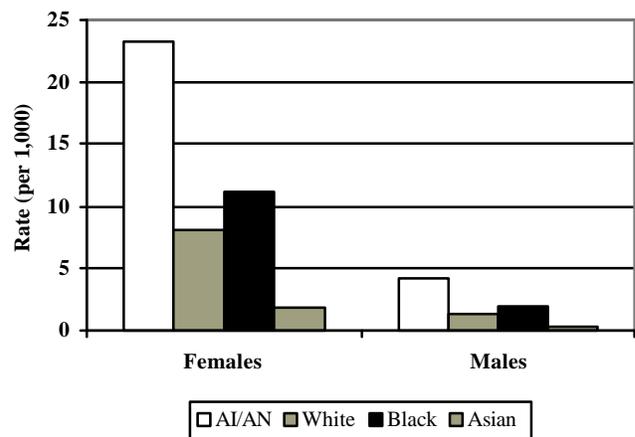
The human and economic toll of violence is high not only for the victims, but also their families, their communities, and society. This great disparity indicates a need for more effective prevention programs and intervention strategies.

For more information, or if you would like to conduct a study on violence in your community, please contact the EpiCenter.

Average Annual Victimizations, by Race, 1993-98



Average Annual Victimizations by an Intimate, by Race, 1993-98



Lyme Disease

Lyme disease is an infection caused by the corkscrew-shaped bacteria *Borrelia burgdorferi* that are transmitted by the bite of deer ticks (*Ixodes scapularis*) and western black-legged ticks (*Ixodes pacificus*). The deer tick, which normally feeds on the white-footed mouse, the white-tailed deer, other mammals, and birds, is responsible for transmitting Lyme disease bacteria to humans in the northeastern and north-central United States. On the Pacific Coast, the bacteria are transmitted to humans by the western black-legged tick.

Spring, summer, and fall are the seasons when the smaller nymphal form of *I. scapularis* is most active in the northeast and midwest and when people are at greatest risk. Adult *Ixodes* ticks are active in the fall, warm days of winter, and spring. The two *Ixodes* ticks are found in a variety of habitats, principally woodlands and bushy areas. Children appear to have a higher risk for tick bite and Lyme Disease.

A typical early symptom of Lyme Disease is a slowly expanding red rash at the site of the tick bite. The rash usually appears a week to a month after the bite and can slowly expand over several days. Sometimes there are multiple, secondary skin rashes. This large rash should not be confused with the harmless red spot that usually is seen immediately after receiving the bite. Many people have a small redness at the site of the bite, which is a normal sensitivity to the bite itself. (If you are uncertain, contact your doctor.) Please note that although the majority of infected persons develop the classic red rash, some do not.

Other common symptoms of early Lyme Disease - with or without the rash - are flu-like, and include fatigue, headache, neck stiffness, jaw discomfort, pain or stiffness in muscles or joints, slight fever, swollen glands, or reddening of the eyes. A pregnant or nursing woman who is bitten by a tick and develops a rash, or flu-like symptoms should contact her doctor.

Summer Intern

Dwayne Jarman, DVM, an MPH candidate at the University of Michigan, has joined the EpiCenter for the summer as a graduate intern. Dwayne is a native of Shelbyville, Michigan and is a member of the Grand Traverse Band of Ottawa/Chippewa. Dwayne attended Michigan State University and was a Research Assistant in a Minority Internation Research Training Grant in Thailand in 1999 and 2000 before receiving his doctorate in veterinary medicine from in 2000. In November 2000, Dwayne founded the Native American Public Health Association at the University of Michigan to support and encourage Native Americans interested in the field of Public Health.



Dwayne's summer project is to develop a survey that will be used by the Gun Lake, Huron Potawatomi, and Pokagon Tribes for community health needs assessments .

If untreated, Lyme Disease can progress to more serious stages. In these later stages of the disease, the joints, the heart and the central nervous system can be involved. One example is so-called "Lyme Arthritis," with attendant joint pain and swelling. These symptoms, which usually occur in a single joint, can go away after a few days, and recur in another joint. Health symptoms, which can occur within one to three weeks after the rash, include dizziness, weakness, and an irregular heartbeat. Still other patients may develop weakness of facial muscles, drooping of an eyelid or a corner of the mouth, or inflammation of the eye.

Got Health? (cont.)

(Continued from page 1)

week. Less than 4% indicated no physical activity.

Data on the American Indian students mirrored that of the general population above, with only minor differences. The only notable exception was that skipping meals was the second most popular method of losing weight (46%), followed by avoiding fats (41%) and avoiding sweets (32%).

This past winter, a Health Fair was held at the local high school and was attended by approximately 950 students. Students were presented information on HIV/AIDS, depression, substance abuse, tobacco issues and more. Incentives were presented to participating youth and they completed a more diagnostically-oriented survey that gathered clinical data on blood pressure, blood sera, cholesterol, percent body fat, height, and weight. The response by the students and the school was very positive.

The data collected from these baseline studies will be used to create intervention strategies including, but not limited to, empowerment for youth through health education, youth asset development that relates to inclusion in the research project, presentations, and articles. Due to results from the preliminary review of the collected data, training is being made available to youth. The students also indicated a particular need for information on nutrition and exercise.

Primary collaborative partners in this study include Northern Michigan University's Department of Health, Physical Education, and Recreation, Keweenaw Bay Indian Community's Department of Health and Human Services, the Office of Minority Health, the Michigan AIDS Fund, Baraga and L'Anse schools, Carolee Dodge Francis, and especially, the youth of Baraga County.

Lyme Disease is treatable. Antibiotics are the treatment of choice for Lyme Disease. Your physician will choose the best treatment for your particular case.

For more information, visit the CDC website at www.cdc.gov/ncidod/dvbid/lyme/index.htm