



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, program planning, data management, and program evaluation.

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Designing Questionnaires and Conducting Surveys for Health Data

Often information is needed about a population, which can only be obtained by conducting a survey—questioning the population itself. Surveys should be considered when there is a specific question to be answered and there is no existing data source to provide the information. Specifically, surveys can be used to obtain many types of information. Some surveys that might prove useful to those providing health services to a population might include a satisfaction survey, behavioral risk factor survey, utilization survey, demographic profile survey, needs assessment survey, health assessment survey, or social and cultural beliefs and practices survey.

To plan and implement a survey, pay attention to these 12 steps: 1) Lay out the objectives of the investigation, 2) Define and locate the target population, 3) Determine what resources are available, 4) Determine sample size, 5) Determine sampling method to be used, 6) Decide on mode of data collection, 7) Decide how data will be processed and analyzed, 8) Develop, field test, and revise the questionnaire, 9) Train the interviewers and conduct fieldwork, 10) Check for coding errors, 11) Enter, tabulate and analyze the results, and 12) Report the results.

Sampling is used to survey large populations by statistically selecting a specified number of persons to be representative of the entire population. Sampling offers the advantages of being relatively quick and cheap, and is

generally more accurate than a census (full population) survey. However, applying sampling methods and selecting sample sizes can be an intimidating task. Consult a statistician or epidemiologist with experience in sampling when in doubt about this critical step.

Surveys can be categorized by their data collection methods commonly including mail, telephone, personal interview, and observation. However, often more crucial is the questionnaire design process. Keep in mind these useful hints when designing your questionnaire: 1) Keep the questionnaire questions as simple to understand as possible as far as reading level, defining terms, and avoiding technical terms and abbreviations, 2) Make the questionnaire easy to code for the purposes of data entry and analysis, 3) Start out with a few lead questions to give the participant a chance to warm up and begin to feel comfortable, 4) Collect the needed information *only* and keep it as short as possible, 5) Don't expect the participant to recall information from a previous question, 6) Make the questions as clear and specific as possible to ensure you get the information you need, 7) Have the questions follow a logical flow, going from general to more specific and grouping like questions together, 8) If possible, derive the survey from other surveys that have already been tested, used, and validated saving yourself some work and also allowing later comparisons to other groups, 9) In multiple

choice questions, always offer exhaustive responses including options for "no opinion" or "don't know."

Once you collect the survey information you are ready for data entry, analysis and interpretation of the results. Lastly, don't forget the important step of reporting the results, not only to those who will use the information that you have gathered, but also to those who participated in the survey.

If you would like help designing, implementing, or analyzing a survey, please contact Holly Clifton or Dawn McCusker at 1-800-472-7207.

This Newsletter is published by the Great Lakes EpiCenter. For copies, or to be added to the mailing list, contact Dawn McCusker or Holly Clifton at 1-800-472-7207.

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What's New at the EpiCenter

Update on EpiCenter work in Michigan...

The EpiCenter had the first meeting of the newly reformed Michigan EpiCenter Advisory Committee on June 6th in Mt. Pleasant, Michigan. Membership for the committee includes 2 EpiCenter staff, 4 Tribal staff, 2 Michigan Department of Community Health representatives (Bureau of Epidemiology and Vital Records and Health Statistics) and 1 Michigan Public Health Institute (MPHI) representative. At the next meeting we would also like to include representatives from the Indian urban programs in Michigan and from the University of Michigan School of Public Health. If you would like to receive a list of the members or recommend anyone for participation, please contact Holly at 1-800-472-7207.

The EpiCenter has been working diligently on completing this year's Community Health Profiles. We are now putting the finishing touches on them and they should be available sometime within the next month. EpiCenter staff are available to discuss the interpretations of the health data in the reports with Tribal health staff. Please call us to arrange a meeting time.

The EpiCenter has provided technical assistance with a needs assessment survey design for one Tribe in Michigan. We have also provided technical assistance to three Michigan Tribes with their Y2K diabetes audits including data entry, analysis, and report writing. The EpiCenter is available to provide any Tribe with diabetes audit form data entry and analysis.

Update on EpiCenter work in Wisconsin...

As many of you know, Dawn has

been on maternity leave. On May 19th she had a son, Solomon. He weighed 7 pounds, 14 ounces.



Solomon
3 1/2 months old

Dawn is back to work at the EpiCenter. She will be working part-time during September (on Tuesdays and Thursdays). Starting in October, Dawn will be back full-time.

Update on EpiCenter work in Minnesota...

Kris Rhodes has completed the Minnesota Tribal Community Health Profiles. The EpiCenter is currently having them printed and will contact Minnesota Tribes for distribution.

Kris has successfully completed her graduate program at the University of Minnesota, School of Public Health. Congratulations Kris!

Bemidji Area Master Plan Assessment

Each area office within the Indian Health Service is required to maintain a current Area Facilities Master Plan. The Bemidji Area Facilities Master Plan was last updated in 1988. An effort is currently underway to produce an updated document that will be of maximum usefulness to the programs within the Bemidji Area.

The Bemidji Area Master Plan Assessment has been designed to identify the health facility needs of each of the IHS Service Units and Tribal Health Programs within the Bemidji Area. Funded entirely by the Bemidji Area Office (BAO), it will provide an objective report on how the space and staff resources of each of our organizations compared to contemporary planning standards. The current number of exam rooms, beds, dental department rooms, providers, etc. will be quantified and compared against the number required by recently adopted IHS facility standards.

The final products will be an individual facilities assessment report

for each Tribe and Service Unit as well as a summary report for the whole Bemidji Area. Individual Tribal information will not be distributed to IHS Headquarters or other Areas without Tribal approval. It is hoped that the information provided by this assessment process will provide an important piece of information for local strategic health planning.

The BAO has contracted with The INNOVA Group to conduct this survey process. The consultant will be guided by a steering committee composed of personnel from the Bemidji Area Office (Clinical Services, Facilities/Biomed, Statistics/Planning and MIS), Great Lakes EpiCenter, Bemidji representative from the Area Tribal Advisory Board and Tribal representatives from the three states. The survey tools were sent out in late July.

Questions concerning this assessment should be directed to Victor Mosser (218) 759-3354 or Barbara Vanek (218)759-3447.

Infant Mortality in Minnesota

Infant mortality rates are a significant indicator of the health of families. While decreasing in the nation as a whole, these rates are alarmingly high among American Indian (AI) communities.

In Minnesota these AI rates have continued to rise, creating disparities between AI and other communities in the state. In fact, in 1998, Minnesota had the highest rate of AI infant mortality of the 14 states able to report a reliable rate.¹

The figures below confirm that

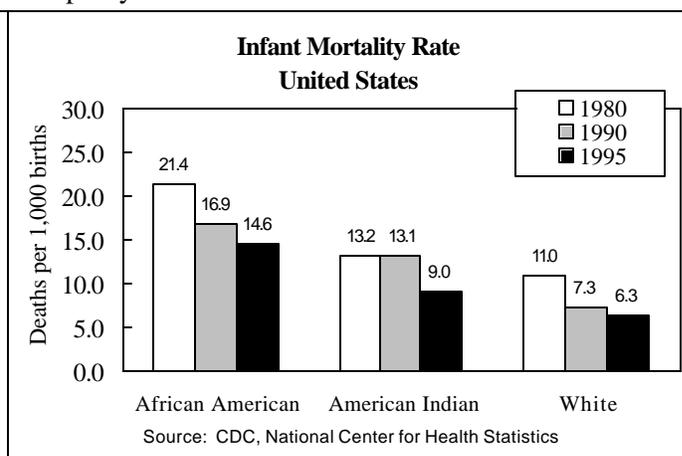
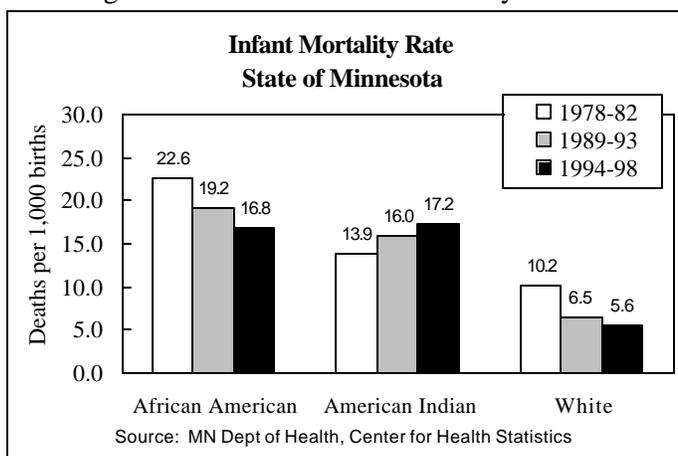
the rate of infant deaths among AI in Minnesota is increasing. In addition, during the years 1994-98, the overall rate in counties where reservations are located was 6.4 deaths per 1,000 births. Among AI in those Minnesota counties, the rate was 15 deaths per 1,000 live births.²

There are many factors which can contribute to the health of infants. The Minnesota Department of Health is very interested in partnering with the Tribes to look at ways to address this disparity issue.

Funding has been set aside for Tribal communities that are interested in working with the state. For more information, please contact Cheryl Fogarty, Infant Mortality Consultant, MN Dept of Health, by telephone at (651) 281-9947 or email cheryl.fogarty@health.state.mn.us.

¹ National Center for Health Statistics – Centers for Disease Control, Infant Mortality Statistics Show Variations by Race Ethnicity and State, July 20, 2000.

² Minn. Department of Health, Center for Health Statistics Mortality Statistics Show Variations by Race Ethnicity and State, July 20, 2000.



Changes in Race Breakdown, 1990 to 1999

Every year the U.S. Census Bureau provides population estimates based on Census data and growth patterns. These are the breakdown of 1999 populations estimates and percentage change since 1990 by race for the three states in our project area:

<u>State/Race</u>	<u>1999 Population Estimate</u>	<u>Percent Change since 1990</u>
Michigan		
American Indian/Alaska Natives	59,897	up 3.9%
Asian and Pacific Islanders	209,147	up 48.0%
Blacks	1,415,201	up 9.0%
Hispanics	275,849	up 36.8%
Whites	8,222,390	up 5.0%
Minnesota		
American Indian/Alaska Natives	58,575	up 15%
Asian and Pacific Islanders	130,537	up 66.1%
Blacks	148,596	up 54.5%
Hispanics	92,589	up 71.8%
Whites	4,437,800	up 6.9%
Wisconsin		
American Indian/Alaska Natives	46,830	up 15.4%
Asian and Pacific Islanders	83,265	up 53.6%
Blacks	293,367	up 18.9%
Hispanics	140,235	up 50.4%

Diabetes Focus

Kidney Early Evaluation Program

We have had some initial discussions with the Kidney Foundation of Wisconsin (affiliate of the National Kidney Foundation/NKF) to learn about the foundation's national Kidney Early Evaluation Program (KEEP) campaign. The National Kidney Foundation has as part of its mission to prevent kidney and urinary tract diseases and improve the health and well-being of individuals and families affected by these diseases. Kidney failure is a major concern within Tribal communities. It is projected nationally that by the year 2010, the number of dialysis and transplant patients will be double the level found in 1997. Recent studies have indicated that early identification and appropriate treatment of early kidney disease can delay disease progression.

While general population screenings have not proven to be cost effective, the NKF has found that screenings targeting high-risk groups have been more successful. KEEP is a health-screening program sponsored by the NKF. KEEP focuses on "high risk" individuals, those with known diabetes and/or hypertension or who have first-degree relatives with hypertension, diabetes or chronic kidney failure. It has been designed to identify individuals at increased risk for kidney disease, provide renal screening and encourage individuals with abnormal screening results to seek further evaluation and

follow-up.

The screening program involves participants completing a questionnaire and having the following tests conducted: blood glucose, hemoglobin, serum creatinine, urine tests for white blood cells, protein, red blood cells and creatinine clearance, blood pressure and height and weight.

Organizations can partner with the National Kidney Foundation and their affiliates to offer this screening program in their communities. The community organization's role would be to advertise the screening program, provide the screening site, provide volunteers to man the various screening stations and a health care provider to conduct a confidential close out with each participant and make appropriate referrals. The National Kidney Foundation would cover the costs of the screening materials and laboratory tests. They would also be willing to provide data entry services and assist with follow-up of abnormal readings.

Would this program be of interest to your community?

Please call Nancy Miller-Korth, Holly Clifton or Dawn McCusker at 1-800-472-7207 for more information. If we find there is an interest, we will continue talking with staff from the Kidney Foundation of Wisconsin to see how we can tailor this program to work within Tribal Communities.

Trainings/Meetings

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 group and one-on-one on-site training on various RPMS packages. Group training will be provided in coordination with the Rhinelander Field Office/Bemidji Area Office staff. If you have any questions please feel free to contact Dina at 1-800-472-7207.

North Central Epidemiology Conference. Chicago, IL. September 28-29, 2000.

APHA Annual Meeting and Exposition: Eliminating Health Disparities. Boston, MA. November 12-16, 2000.

Internet Resources

Michigan Critical Health Indicators:
www.mdch.state.mi.us/

Michigan Health Statistics:
www.mdch.state.mi.us/PHA/OSR/index.htm

Michigan Communicable Disease:
www.mdch.state.mi.us/pha/epi/cded/cd/cd.htm

2000 Michigan Fish Advisory:
www.mdch.state.mi.us/pha/fish

Wisconsin AIM :
www.dhfs.state.wi.us/localdata/

Wisconsin Health Statistics:
www.dhfs.state.wi.us/stats/index.htm

Minnesota Dept of Health 1998 Health Statistics: <http://>

Terminal Emulation Packages at a Glance

In the Bemidji Area many Tribal Health Facilities use the Resource Patient Management System (RPMS). RPMS is a server that holds all clinical data for each tribe. It contains various packages such as Scheduling, Patient Registration, Patient Care Component (PCC) Data Entry, Third Party Billing, and Accounts Receivable. Each package stores data that is entered by the health staff. Each package can be linked to the PCC Data Entry package, which can produce a health summary that contains clinical information for each patient.

The RPMS server may be located in a variety of areas throughout the health facility depending on the size of the facility. The data that is entered into each package is stored on a tape in the tape-drive of the server. At night the server downloads all of the information contained on the tape and saves it on a hard drive of the server.

Each staff person should have access to a personal computer or dummy terminal. A dummy terminal is directly linked to the server and only allows to access the RPMS. If a personal computer is used there will be an icon (picture) which when clicked on will access the server through a terminal emulation package.

A terminal emulation package allows the user to access the RPMS server from a personal computer. The packages that are used throughout the Bemidji Area include Procomm Plus, Net Term, Hyper-Terminal, and Tera Term. Depending on what packages the facility user has access to will help decide which terminal emulation package they may use. Listed below are some pros and cons of

each package. This may help the facility user to decide which package or variety of packages may benefit their health facility.

Procomm Plus (website: www.symantec.com/region/reg_ap/product/procommplus/details.html)

Pros:

1. Easy to set up.
2. Can right mouse click, drag, highlight, and print what is on your screen to a printer, file, or fax.
3. Fax documents from your personal computer if you have a modem line connected.
4. Telnet over a network.
5. Gain access to the internet.
6. Transfer files.
7. Provides scripting to recode information.
8. Use the Community Health Representative, Mental Health/Social Service, and Immunization package in RPMS.

Cons:

1. You must purchase Procomm Plus and have a license for each user. Price for the newest version is \$149.50.

Net Term (website: starbase.neosoft.com/~zkrr01/html/netterm.html)

Pros:

1. A trial version can be downloaded from the internet.
2. There is a dial-up feature.
3. TCP/IP for networking.

Cons:

1. Difficult to configure set up.
2. Screen viewing problems while using the Community Health Representative, Mental Health/Social Service, and Immunization package in

RPMS.

3. Must purchase after trial period is over. Under \$40.00 per license.

Hyper Terminal (website: www.hilgraeve.com/http/index.html)

Pros:

1. Included when you purchase Windows 95, 98, & NT.
2. Easy to install with on-line step-by-step instructions.
3. Can right mouse click, drag, highlight, and print what is on your screen to a printer or file.

Cons:

1. Unable to print from RPMS.
2. Screen viewing problems while using the Community Health Representative, Mental Health/Social Service, and Immunization package in RPMS.

Tera Term (website: www.washington.edu/computing/software/uwick/teraterm/)

Pros:

1. It is free.
2. Easy to set-up.
3. Can be downloaded from the internet.
4. Ability to use the Community Health Representative, Mental Health/Social Service, and Immunization package in RPMS.

Cons:

1. Cannot right mouse click, drag, highlight, and print what is on your screen to a printer or file.

If you have any questions about terminal emulation or RPMS you may contact Dina George at Great Lakes EpiCenter, 1-800-472-7207 or send e-mail to

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