

THE IHS PRIMARY CARE PROVIDER

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



March 2001

Volume 26, Number 3

Man's Best Friend: Dog Bite Related Injuries on the Rosebud Reservation 1991 – 1998

Tina Russell, BS, CEI, MHA, Supervisory Service Unit Sanitarian, Rosebud Indian Health Service. Rosebud South Dakota; David Grossman, MD, MPH, Harborview Injury Prevention and Research Center, Seattle, Washington; L.J. David Wallace, MSEH, Injury Prevention Specialist, Centers for Disease Control and Prevention, Atlanta, Georgia; and Larry Berger, MD, Albuquerque, New Mexico

Introduction

Dog bite injury has been studied for many years, yet continues to be among the leading public health concerns in the United States. Each year, dog bites result in an average of 20 deaths and at least 2 to 3 million people requiring medical treatment and restricted activity.^{1,2} In fact, dog bite victims account for up to 5% of all hospital emergency room admissions. According to the Humane Society of the United States (HSUS), dog attacks are the most commonly reported childhood public health problem in the US, as dog attacks exceed the number of reported instances of measles, whooping cough, and mumps combined.^{1,4} Some victims do not seek medical attention or report the incident, yet they still suffer from psychological trauma, anxiety, and the loss of work or school. In addition, dog bites remain a possible mode of rabies infections, requiring post-exposure prophylaxis. Animal bites are dealt with at the local geopolitical level, and reports are not forwarded to the federal government for inclusion into an ongoing national surveillance system.¹

The Rosebud Reservation is located in rural south central South Dakota, 30 miles north of the Nebraska border, spanning 5,961 square miles. Based on the 1997 US Census, the reservation population is 10,790.

Rosebud's Office of Environmental Health, concerned about the incidence of dog bites, holds free rabies clinics in the communities throughout the reservation each year. The Remote Area Medical Team (RAM), supported by the HSUS, has also

provided rabies vaccinations in addition to spaying and neutering services to the residents. The Rosebud Tribe has Animal Control Statutes located within the Law Enforcement Ordinance, but these statutes are not consistently enforced.

The purpose of the study reported herein was to epidemiologically characterize dog bite injuries among residents of the Rosebud Reservation. Particular emphasis was placed on the evaluation of medical treatment lag time and investigation lag time, as prompt treatment and receipt of referral for investigation are crucial.

Methods

When seeking treatment at the Rosebud Hospital for an animal bite, the visit is documented on the Emergency Room

In this Issue...

- 33 Man's Best Friend: Dog Bite Related Injuries on the Rosebud Reservation 1991-1998
- 37 Accuracy of Using PCC Data for Measuring Childhood Obesity
- 39 University of Minnesota School of Nursing Announces Internet-based Masters Degree Program
- 40 Indian Aging Conferences of Interest
- 40 Position Vacancies
- 41 Where to Obtain Magnets
- 41 The 5th Annual Elders Issue
- 42 Summer 2001 Geriatric Institute: Major Causes of Morbidity and Mortality in an Aging Population
- 43 Meetings of Interest
- 46 Postgraduate Course on Obstetric, Neonatal, and Gynecologic Care
- 47 Geriatric Dentistry and Oral Health for Non-Dentists

(ER) log, and this triggers the initiation of the animal bite protocol and possibly a call to the Office of Environmental Health (OEH). The animal bite protocol, which was developed by OEH, serves two purposes. First, it facilitates prompt reporting of the animal bite by the medical/clinical staff to OEH, and second it requires the collection of crucial information surrounding the occurrence of the bite while the patient is still at the facility. The protocol form, which is divided into three sections (patient information, animal information, and follow-up), is completed to the extent possible by the clinical staff and is then forwarded to OEH personnel for investigation. At times, the treatment of a serious animal bite may result in the immediate notification of OEH personnel as well as the Rosebud Sioux Police Department.

The study population consisted of all individuals of American Indian descent who resided on the Rosebud Reservation and who utilized the Rosebud Indian Health Service (IHS) Hospital as a source of medical care. The cases were those individuals in the study population who suffered a dog bite between January 1, 1991, and December 31, 1998 and who sought treatment at the Rosebud Hospital or were transferred from the Rosebud Hospital to another facility for further treatment.

Data related to the victim's gender and age, medical treatment lag time, investigation lag time, gender of animal, type of attack, vaccination status, time of year (month), type of medical treatment required, costs, alcohol involvement, ownership status, community where bite occurred, and number of animals involved in bite incident were studied. A dog bite was defined as any attack by a dog resulting in an open wound, fracture, contusion, and/or superficial injuries. In an attempt to characterize attack types, unprovoked attacks were defined as attacks by a dog when the victim is behaving in a non-confrontational way (e.g., individual is standing, walking, or involved in any other activity such as riding a bike or playing in a neutral territory). A provoked attack was defined as anything other than an unprovoked attack. Alcohol involvement was based on documentation in the victim's chart. The presence of an alcohol odor, the victim's admission to alcohol consumption, or any other available documentation (e.g., a blood alcohol level) constituted a positive result. Ownership status was categorized as either owned or stray. Dogs were designated as owned if an individual's name was supplied on the form or if a rabies vaccination certificate was located for the animal, which indicated the owner's name. Otherwise, animals were noted as strays.

Medical treatment lag time was defined as the time between the occurrence of the bite and the receipt of treatment. Investigation lag time was defined as the time between the receipt of treatment and the receipt of the animal bite protocol form for investigation by OEH. Cost estimates in most cases involved medical care treatment costs, investigation/referral costs, and transportation costs. See Table 1 for a summary of cost estimates.

To evaluate animal bites, a data collection form was developed. See page 35 for a copy of the form. These data collection

forms are completed through the review of the victim's medical chart and the completed animal bite protocol form. Data from all data collection forms were entered in the EPI INFO Version 5.0 computer program for analysis.

Results

Three hundred and ninety-six animal bite cases were identified through the use of the hospital emergency room log and the animal bite protocol. Of the 396 animal bite cases, 346 involved canines. The rate of dog bite injury was calculated as 431 per 100,000. Subject's ages ranged from 0 to 79 years old. The average age of a case-subject was 11 years. Fifty-three percent (182) of the bites occurred to children age 0 to 13, while 77% (262) of the bites occurred to individuals 26 years or younger. Gender distribution of the cases was 60% male (207) and 40% female (139). Data regarding victims' age and gender were consistent with a study conducted on the Navajo Reservation.³

Twenty-four percent (83) of the dog bites were provoked, 49% (167) were unprovoked, and for 27% (91) the attack type was unknown. Among children age 0 to 13, 25% (45) were provoked, 41% (74) were unprovoked, while the attack type was unknown in 35% (63).

Table 1. Cost estimates for emergency room, outpatient visits, response from the police department, OEH, and the ambulance service.

Service	Cost Estimate Per Case (Dollars)	Total (Dollars)
Treatment		
ER/OP Clinic		
• Nursing Services	125	
• Physician Services	154	
Subtotal	279	131,130
Hospitalization		
• Base/Day	180	
• Discharge	104	
• Room & Board	315	
Subtotal	599	5,867
Rabies Vaccine		
• 14 Patients	1,500	
Subtotal	21,000	21,000
Investigation/Referral		
OEH-Min. of 3 hrs.	15/hr. x 3	
Subtotal	65	20,985
RPD	10/hr.	
Subtotal	10	3,307
Transportation		
RAS	365/Base Call	
\$5/mi.		
Subtotal	365	19,895
TOTAL		202,185

ANIMAL BITE PROTOCOL

Rosebud IHS Hospital

Note: This form is to be ***thoroughly completed*** and signed by the treating physician.

Patient Information: Medical Staff to Fill Out:

Chart Number: _____
Date of Incident: _____ Time of Incident: _____
Date of Medical Attention: _____ Time of Medical Attention: _____
Location of Incident: _____

Victim's Name: _____ Victim's Date of Birth: _____
Victim's Address (Include Directions): _____

Victim's Phone number: _____ Parent's Name (If applicable): _____
Did Medical Staff Give the Patient the Option of Immunizations? YES or NO
Was the Patient Immunized? YES or NO
Patient Given Tetanus? YES or NO
Type of Prophylaxis Used: Rabies Vaccine Imovax YES or NO
Rabies Immune Globulin (Human) USP YES or NO

****Please Have the Treating Physician Sign This Form:*** _____

Security to Fill Out:

Police Contacted? YES or NO Tribal City County
Officer's Name or DEN#: _____

Animal Information: RPD/OEH to Fill Out:

Type of Animal: Breed _____ Color _____ Markings _____ Size _____
Was the Animal a Stray? YES or NO Animal's Name _____
Owner of Animal: _____ Address (Include Directions): _____

Owner's Phone#: _____
Vaccinated for Rabies? YES or NO Date of Vaccination: _____ Tag#: _____
Was Attack Provoked? YES or NO
Circumstances Surrounding the Incident: _____

Is the Animal Tied-Up (Restrained) for ten days? YES or NO If Yes Where: _____

OEH is available from **8:00 AM – 4:30 PM, Monday – Friday**. Please notify by telephone if victim is treated during regular business hours (Ext. 307).

Both male and female dogs were responsible for biting in equal numbers. Two hundred and seventy nine dog bites (88%) occurred from pets, while 42 (12%) were strays. Of those 279 bites from pets, 172 (62%) occurred to male case-subjects while 107 (38%) occurred to female case-subjects. These results are dissimilar to the results of urban area studies, such as the Philadelphia study in which 60% of the dogs were determined to be unowned.⁵

Seven (2%) of the cases required hospitalization and/or extended care; of these 7, 3 (43%) required a 3-day period of hospitalization. One hundred and sixty (46%) of the dogs that inflicted a dog bite had been vaccinated for rabies, 45 (13%) had not been vaccinated, and the vaccination status of 141 (41%) was unknown. Fourteen case-subjects (4%) consented to rabies post-exposure prophylaxis vaccinations, however only one case-subject completed the entire series. The total cost for the vaccine for these 14 case-subjects was \$21,000.

Medical treatment lag time ranged from 0 to 36 days, with a mean of 5 days. Of the case-subjects, 283 (83%) were treated within 24 hours, 50 (15%) were treated within 5 days, 5 (1%) within 6–10 days, and 3 (1%) were treated 10 days or more after being attacked. Ownership status (pet versus stray) was not significant when examining how long it took to seek medical treatment.

Investigation lag time ranged from 0 to 85 days, with a mean of 5.1 days. Fifty-four (17%) were referred to OEHS within 24 hours, 183 (58%) within 5 days, 41 (13%) within 6-10 days, and 38 (12%) were referred more than 10 days after the attack. Ownership status (pet versus stray) was not significant when examining how long it took to receive the referral. Eleven (3%) of the cases were alcohol involved.

Community N had the highest number of bites, 66 (20% of the total), followed by Community K with 63 (19%), Community A with 53 (16%), and Community F with 31 (9%). These communities have proportionately greater populations than other reservation communities, therefore accounting for the highest number of dog bite incidents.

The majority of the bites, 307 (88%), resulted from a single dog while 18 (5%) of the bites involved a group or pack of dogs.

Discussion

This study is limited by the quality of the information provided on the animal bite protocol forms, found in medical records, and gathered during victim interviews. Of particular concern is the determination of the type of attack. This is subjective, as the victim's perception of an attack may be influenced by misunderstanding the implications of their actions. For example, it is known that the small stature of a child may increase the dog's tendency to establish its dominance over the child. Generally, when a child is confronted with a vicious dog, he/she attempts to run away from the animal.²⁻⁴ Yet, the animal's natural instinct is to chase and catch the fleeing prey.

Another limitation of this study is the non-reporting of dog bites. Not all dog bite victims report incidents or seek medical care. Explanations that might account for the non-reporting include: distance to the hospital, lack of transportation, failure

to recognize the importance of reporting the incident, non-recognition of a bite by the treating physician, or a biting dog that is owned by the victim.⁵⁻⁸ It is acknowledged that a case of human rabies has not been confirmed in South Dakota in the last few years, yet the possibility of canine transmitted rabies cannot be dismissed. State testing of "range animals" (coyotes, skunks, horses, etc.) shows rabies to be present in the environment. Efforts should be undertaken to encourage residents to seek medical attention, or at minimum to report dog bite incidents to OEHS.³⁻⁶

Consistent with other studies, children are the "at risk" group, regardless of the type of attack. The emotional trauma to children can last a lifetime and could handicap a child both emotionally and mentally. Efforts should be undertaken to educate children and the community through educational programs in schools and at community meetings.

For a large percentage of the bites (41%), the vaccination status of the dog was unknown. Possible explanations for this include: the owner may have misplaced the vaccination certificate, the dog may have been given away and given a different name, the vaccination certificate database may not be current, or failure to identify the dog when investigating the incident. When encouraging responsible pet ownership, owners should be reminded to keep their animals' vaccinations current and to keep track of all certificates. Implantable microchips with vaccination and ownership data could be a possible solution.

As noted earlier, the investigation lag time ranged from 0 to 85 days, with a mean of 5.1 days. The prompt investigation of bite incidents is crucial in that it provides information necessary for the effective treatment of the victim, and the isolation and quarantine of the suspected animal. Increased investigation lag time could be attributed in part to confusion regarding the protocol and the filing of the protocol form in the patient chart rather than forwarding it to OEHS for investigation. Training of all staff regarding the animal bite policy is warranted. In addition, the animal bite protocol form needs to be reviewed and revised to make it more user-friendly.

Conclusion

Despite the efforts of the Office of Environmental Health to increase the number of dogs that are vaccinated and spayed or neutered, the dog population continues to increase, as does the incidence of dog bites. Based on the results of this study, the following recommendations are made:

1. Review and revise the hospital animal bite protocol.
2. Raise community awareness of responsible pet ownership and dog bite reporting through educational programs in the schools and community meetings.
3. Establish a Dog Control Task Force to implement an animal control program and to enforce current animal control statutes.
4. Establish a database of non-fatal dog bite injuries.
5. Continue the coordination of spaying and neutering clinics with RAM.

References

1. Sacks JJ, Kresnow MJ, Houston B. Dog bites: how big a problem? *Injury Prevention*. 1996; 2:52-54
2. Humane Society of the United States: *Dog Bites*. 1998
3. Daniels TJ. A Study of dog bites on the Navajo Reservation. *Public Health Reports*. 1996; 101:50-59
4. Case DB. Kids, dog bites and picture books. *Community Animal Control*. 1987;16-17,28
5. Stull J. An analysis of reported dog bites: the impact of unowned animals and issues of reporting. *Public Health Reports* 1998
6. Centers for Disease Control and Prevention: Human Rabies Prevention-United States, Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR*. 1999;48:1-22
7. Gershman KA, Sacks JJ, Wright JC. Which dogs bite? A case-control study of risk factors. *Pediatrics*. 1994;93:913-917
8. Sacks JJ, Sattin RW, Bonzo SE. Dog bite-related fatalities from 1979 through 1988. *JAMA*. 1989;262:1489-1492
9. Centers for Disease Control and Prevention: Dog-Bite-Related Fatalities-United States, 1995-1996. *MMWR*. 1999;46:463-467
10. Sacks JJ, Lockwood R, Hornreich J, Sattin RW. Fatal dog attacks, 1989-1994. *Pediatrics*. 1996;97:891-895
11. Cummings P. Antibiotics to prevent infection in patients with dog bite wounds: A meta-analysis of randomized trials. *Annals of Emergency Medicine*. 1994;23:535-540
12. Anderson HS. An Evaluation of the Livestock Control Project on the Fort Apache Indian Reservation. IP Fellowship Program 1995
13. IHS Headquarters Service Population, 1998.

Accuracy of Using PCC Data for Measuring Childhood Obesity

Stanley P. Griffith, MD, Medical Informaticist, Information Technology Support Center, IHS, Albuquerque, NM; Mario D. Garrett, PhD, Data Analysis Services, Albuquerque, NM; and Pat Ramsey, RN, Data Quality Consultant, Young, AZ

“GRPA measures,” stemming from the Government Performance and Results Act of 1993, are reports that are required of IHS to assure that our agency is appropriately using its budgeted funding to provide a high quality of care to American Indians and Alaska Natives. The GPRA Pilot Study was designed to examine whether or not data already contained in the PCC (Patient Care Component), the IHS clinical information

system, could be used to perform GPRA measurements with acceptable accuracy, thus reducing reporting burdens on Areas and local programs. To do this, the study was structured to allow us to compare manual reviews of a facility’s paper charts with analyses using data contained within the PCC. This article reports the results of the analysis of a performance measure to assess the prevalence of obesity in children between the ages of 3 and 5 years. This study was conducted at one site – a medium-sized facility that primarily delivers outpatient care.

Methods

In this study, a sample of 181 patients was selected at the identified facility using the PCC application. We then gathered pertinent information (date of visit, weight, height) from that facility’s PCC system, on all visits for each of these patients during the study time period (June 30, 1998 through June 29, 1999). We analyzed the data and a detailed report on these visits was provided to the manual chart reviewer. These charts were pulled and manually reviewed. The reviewer compared each of these individual data elements for each visit and patient from the facility’s charts with the data provided her from the PCC system. Individual data elements were compared to determine omitted data elements, erroneously entered data, and entire missing visit records.

As we analyzed the data it soon became clear that a small but significant number of visits could not be found in the study facility’s charts, but rather could only be found in the separate charts of the service unit’s outlying clinics. Resource considerations precluded our chart reviewer from traveling to each of those outlying facilities to manually review those charts, too.



Therefore, to allow us to report these data and their potential impact on the overall accuracy of the measure, classifications were made based on a third, derived method that we termed “best available data.” This term was chosen to best represent an artificial concatenation of data. For each patient, if data existed in the facility’s chart, we used those data.

For visits to outlying clinics included in PCC data but not the study facility’s chart, we used those data available in the PCC. Short of actually reviewing all these charts at all of the other chart-maintaining clinics within this service unit, we believed this would best represent a gold standard for comparison.

Finally, using this information, various results were determined for each data collection method (comparing the facility’s RPMS system, the study facility’s paper charts, and the “best available data”).

For each method of data collection a determination was made for every patient as to whether or not a height and weight had been obtained on the same visit for that patient. If so, the last such visit for each patient was used to calculate a body mass index (BMI) and then the patient was classified as either “overweight,” “at risk for overweight,” “normal,” or “underweight,” utilizing the most current table of definitions published on the CDC (Center for Disease Control and Prevention) web site. If the child did not have a height and weight obtained on any visit during the study period, the child’s record was classified as “insufficient data.” These classifications for each method were compared.

Results

We found that these 181 patients had a total of 559 visits to all facilities within this service unit. Of these 559 visits, 556 (99.4%) were found in the PCC database. Four hundred and ninety-one of the 559 visits (87.8%) were found within the study facility’s paper chart. All of the 68 visits (12.2%) not found within the chart were visits to outlying clinics within the service unit, facilities that maintained their own paper charts. In this study, we did not identify any PCC forms missing in the paper chart, or misfiled paper chart forms.

To evaluate the accuracy of individual data elements, we only looked at the 491 visits with a visit record in the study facility’s written chart. The pertinent data (date of visit, weight, height) exactly matched for 461 of these 491 visits (93.9%). These individual data elements matched for 1,436 of the 1,473 individual elements (97.5%). Three visits (0.6%) present in the chart could not be found in the PCC data, and a total of 27 visits (5.5%) had errors in the PCC data elements. Of these 27, a data element was completely omitted for 15 visits (3.1%), and for 13 (2.6%) the data were entered but incorrect. One visit had both omitted data and erroneous data.

Although the differences between classification by chart and PCC were not statistically significant, when compared to the best available data, the classification by PCC was consistently as good as or better than that by chart (See Table 1). The majority of children, 56.9 to 65.2% depending on the method used, did not have both a height and weight on the same day and could not be classified. Chart data corrected erroneous classifications based on PCC data for 5 patients and PCC allowed classification of 15 patients who could not be classified with chart data (See Table 2).

Table 1. Number of patients who were normal weight, underweight, at risk of overweight, overweight, or had insufficient data to make this determination. Total # of Patients = 181.

	Under weight % (#Yes)	Normal % (#Yes)	At Risk of Ovrwt % (#Yes)	Over weight % (#Yes)	Insufficient Data % (#Yes)
According to chart data?	1.7%(3)	23.2%(42)	5.5%(10)	4.4%(8)	65.2%(118)
According to PCC data?	1.7%(3)	26.5%(48)	6.6%(12)	6.1%(11)	59.1%(107)
According to “best available data?” ¹	2.2%(4)	28.7%(52)	6.6%(12)	5.5%(10)	56.9%(103)

¹ The definition of “best available data” is detailed in the “Methods” section of this article.

Table 2. Children who had a different classifications based on PCC versus chart data.

	# Yes	%
For how many patients did the chart correct a classification due to erroneous PCC data? ²	5	2.8%
For how many patients did PCC data allow a classification not otherwise possible because the data was not in the study facility chart? ³	15	8.3%

² Three children who had insufficient data for PCC to classify would have been correctly classified “normal” by chart data. Another child classified “overweight” by PCC would have been correctly classified “underweight” by chart data. One child classified “overweight” by PCC would have been correctly classified “normal” by chart data.
³ Fifteen children who lacked data in the study facility chart were classified in various categories with PCC data.

Conclusions

Our data showed that at this one facility and for the data elements studied, PCC data have greater than 97% accuracy when compared to the written chart. This is a reassuring finding. Clearly, however, there is ample room for improvement and we, and others, are already working on various initiatives to improve the accuracy of these and other data in the PCC system.

Moreover, it appears that at this facility, PCC does at least as well in classifying patients as we could do manually from the written chart. Actually, the accuracy of these classifications looked better using PCC data than it did using the study facility’s paper charts alone, although most of these differences are not statistically significant.

Our data show that chart reviews conducted just at this one facility and not including chart reviews at all chart-maintaining

sites within this facility's service unit resulted in a loss of approximately 12% of pertinent visits and all data they contained. Pragmatically, this has important implications for how we perform GPRA measures for our agency. Although we could consider just using the PCC as a "record locator" to identify all charts for the selected patients at the various chart-maintaining sites within a service unit (and beyond), all charts would then have to be manually reviewed, something that would likely be prohibitively resource intensive.

Fortunately, these data, however, also suggest that the existing PCC data alone (and eventually data from other, non-PCC clinical information systems) could be used to perform these measures with sufficient accuracy to meet GPRA needs, a much more cost-effective strategy.

Finally, this study shows that a majority of 3- through 5-year-old children at this facility did not have both a weight and height measured on the same visit during this one-year period. Besides the potential clinical concerns (although there are understandable reasons why every child presenting to this facility may not have had both a height and weight performed within a year), this raises the question of whether or not there is significant bias in the subset of patients who have had these measurements compared to those who have not. This study was not designed to answer this question.

There are several limitations to these conclusions. This study only provides some of the first formal, empiric data we have on this specific question. In addition, results and conclusions are based on data from only one facility and only on the data elements and measure studied. Finally, our manual chart reviewer looked for data in the paper chart with a PCC report in hand. It is likely that she was able to find more chart data than a typical reviewer would find without the PCC prompts, thus over-estimating to some degree what would have been the accuracy of a manual chart review performed alone.

As we begin to use PCC data for these kinds of measures, we need to continue to evaluate more and different kinds of data and measure their accuracy, in an ongoing fashion, at multiple and varied facilities.

Acknowledgments

The authors would like to thank Dan Peterson, MD, for his advice on the statistical analysis of these results and extensive help in revising this article, and Bill Green, MD for his advice concerning our results and conclusions, which helped improve their clarity and accuracy.

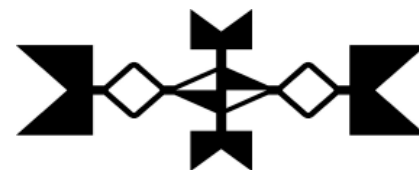
University of Minnesota School of Nursing Announces Internet-based Masters Degree Program

The University of Minnesota now offers a Master of Science Degree with specialization in Public Health Nursing, Women's Health Care Nurse Practitioner, or Nurse-Midwifery through interactive web-based education. Students can pursue graduate education without relocating.

A key goal of this project is to increase the availability of ethnically/culturally and geographically diverse master's prepared public health nurses, nurse-midwives, and women's health care nurse practitioners. The *Native American Nurses Program* (part of the Center of American Indian & Minority Health) offers summer enrichment programs, ongoing academic and cultural support, and counseling. The web-based master's degree program provides an opportunity for American Indian nurses, and nurses who serve American Indian communities, to further their education without leaving their home communities.

The program includes online study with 2 to 3 on-campus sessions per semester. Students may study part or full-time and can finish their masters degree in as little as two years.

Further information is available by calling Trina Lone Hill at (612) 624-0143; toll free (888) 240-8636; or visit www.nursing.umn.edu.



Chief Executive Officer
Native American Community Health Center, Inc.; Phoenix, Arizona

The incumbent would serve as CEO for the Native American Community Health Center, Inc. (NACHC). The CEO has overall managerial responsibility and full accountability for managing all activities of NACHC. The CEO will carry out this leadership responsibility within the agency Board of Directors' guidelines and with full recognition of the professional and technical expertise possessed by subordinate managers and staff. In addition to the executive management of clinical, community health, and administrative activities, this responsibility also includes an implicit charge to identify the unique health care needs of the patient population served, and to plan, develop, and implement a comprehensive health care delivery system tailored to these needs.

Within NACHC guidelines, the CEO develops, establishes, and directs the implementation and execution of overall policies and procedures for the administration and operation of a compre-

hensive health care delivery system for NACHC; develops, evaluates, and adjusts organization, position and staffing structures and management systems to accomplish the basic mission of NACHC. The incumbent supervises, through subordinate managers and supervisors, employees who engage in performing a variety of health care and supportive activities.

The CEO is responsible to the Board of Directors of NACHC. Salary: DOE. Qualifications and experience: A master's degree in public health, health administration, or related disciplines appropriate to the position, and four years of specialized experience in or related to the line of work of the position, which has provided the applicant with specific knowledge, skills, and abilities to successfully perform the duties of the position. Indian preference will be applied to this position.

For more information please contact the Human Resources Director, at (602) 279-5262 ext. 257 or send your resume to NACHC, 3008 North 3rd St., Suite 310, Phoenix, Arizona 85012; fax (602) 279-5390.

Where to Obtain Magnets

Dear Editor:

In articles in two recent issues of THE IHS PROVIDER ("Do You Have a Magnet in Your Emergency Room?" Volume 25, Number 11, November 2000, page 174; and "Magnets in the Emergency Room Revisited" Volume 26, Number 1, January 2001, page 9), the topic of ophthalmic magnets was discussed. A source for ophthalmic magnets is Wilson Ophthalmic Corp., P.O. Box 496, Mustang, OK 73064; (800) 222-2020. They carry three magnet options. The Firlene Eye Magnet is the largest and most powerful; the cost is \$170.48. They also carry a smaller

magnet with loop for about \$36.00. You can get the smaller loop version with a magnifier for about \$77.27.

Tim Strand, O.D.
Chief Optometrist, Santa Fe Service Unit

Editor's note: We appreciate Dr. Strand's sharing this information with our readers, and we encourage others to do the same when they have similar tips that may be valuable to those in Indian Country.

The 5th Annual Elders Issue

The May 2001 issue of THE IHS PROVIDER, published on the occasion of National Older Americans Month, will be the fifth 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 care issues. Inquiries can be addressed to the attention of the editor at the address on the back page of this issue.



Change of Address or Request for New Subscription Form

Name _____ Job Title _____

Address _____

City/State/Zip _____

Worksite: IHS Tribal Urban Indian Other

Service Unit (if applicable) _____ Social Security Number _____

Check One: New Subscription Change of address

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

Old Address _____

THE IHS PRIMARY CARE PROVIDER



THE PROVIDER is published monthly by the Indian Health Service Clinical Support Center (CSC). Telephone: (602) 364-7777; Fax: (602) 364-7788; e-mail: the.provider@phx.ih.s.gov. Previous issues of THE PROVIDER (beginning with the February 1994 issue) can be found at the CSC home page, www.csc.ih.s.gov.

- Wesley J. Picciotti, MPA *Director, CSC*
- John F. Saari, MD *Editor*
- Thomas J. Ambrose, RPh
- E.Y. Hooper, MD, MPH *Contributing Editors*
- Cheryl Begay *Production Assistant*
- Elaine Alexander, RN *Exec. Leadership Dev. Prog. Coordinator*
- Theodora R. Bradley, RN, MPH *Nursing Consultant*
- Erma J. Casuse, CDA *Dental Assisting Training Coord.*
- Mary Beth Kinney, MPH, EdD *Dental Ed. Spec.*
- Edward J. Stein, Pharm D *Pharmacy Consultant*

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

Circulation: THE PROVIDER (ISSN 1063-4398) is distributed to more than 6000 health care providers working for the IHS and tribal health programs, to medical and nursing schools throughout the country, and to health professionals working with or interested in American Indian and Alaska Native health care. If you would like to receive a copy, send your name, address, professional title, and place of employment to the address listed below.

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

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

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

PRESORTED STANDARD
POSTAGE AND FEES PAID
U.S. DEPT. OF HEALTH & HUMAN
SERVICES
PERMIT NO. G-290

CHANGE SERVICE REQUESTED

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300