Fire mortality rates are exceedingly high in American Indian and Alaska Native (AI/AN) communities. Between 1990 and 1996, the age-adjusted residential fire mortality rate for AI/AN was 2.6 times greater than the US All-Races rate (3.4 versus 1.3 deaths per 100,000, respectively; see Figure 1). Residential fire mortality rates are very high in several Indian Health Service (IHS) Areas, especially the Alaska Area and those Areas serving Northern Plains tribes. For example, the age-adjusted Bemidji Area IHS residential fire mortality rate of 11.2 per 100,000 is over eight times the US All-Races rate (1990-96).

Fire is the leading cause of childhood injury death in the home, and children under five years old are at the highest risk. American Indian and Alaska Native children ages birth to four years are at 2.4 times higher risk than the US All-Races population (Figure 2). Because AI/AN children are at such high risk of residential fire death, IHS and the US Fire Administration joined forces this year to create the “Sleep Safe” fire safety program. The goal of the Sleep Safe program is to reduce fire and burn injuries in AI/AN children ages birth to five years to one-half the US All-Races rate by the year 2010.

The Sleep Safe program targets children and families enrolled in American Indian Programs Branch (AIPB) Head Start programs. Head Start is committed to providing comprehensive developmental (health) services for low-income preschool children ages three to five. Currently, 141 Head Start programs serve 19,811 AI/AN children in the United States. Head Start is ideal for the Sleep Safe program because it emphasizes parent and community involvement. This community outreach provides an opportunity for providing hands-on fire safety education, home surveys, development of community linkages, and intervention.

Successful injury prevention programs utilize a multiplicity of approaches, including educational efforts, environmental modification, and passage and enforcement of laws. The Sleep Safe program incorporates all of these elements into its two components: 1) a curriculum consisting of four guides; and 2) provision and installation of smoke alarms in homes needing them. A description of these two components follows.

The following guides comprise the curriculum module:

Teacher’s Guide - Administered by Head Start educators,
this guide gives suggestions for Center activities to reach parents, childcare providers, and children.

**Parent/Childcare Provider’s Guide** - Administered by Head Start and/or tribal staff, this guide is designed to teach parents and childcare providers the scope of the fire injury problem, and things they can do to improve fire safety in the home. It focuses on the importance of smoke alarms and their selection, installation, and maintenance.

**Children’s Guide** - Administered by Head Start educators, this guide gives suggestions to plan and implement children’s learning activities. It contains the Sesame Street Fire Safety Station, which provides songs, posters, coloring, and other activities to help children learn about fire safety.

**Tribal Partnerships Guide** - Administered by Head Start staff and/or tribal partners, this guide helps participants develop a community fire safety plan for action, including identifying partners, writing and passing fire safety laws, and developing public service announcements.

Figure 1. Age-adjusted residential fire mortality rate by race, 1990-1996

Photoelectric smoke alarms are installed in every home in which the residents have completed the Parent/Childcare Provider’s Guide, and which are shown by home survey to need an alarm. Smoke alarms are installed by Head Start staff or a collaborating program, such as the local fire department.

By providing early warning of a fire, a smoke alarm can reduce the risk of residential fire death by 40% or more. However, disconnection of the alarm due to nuisance alarms, primarily from cooking vapors, is a significant factor resulting in inoperability of smoke alarms in AI/AN homes. Photoelectric smoke alarms were chosen for the Sleep Safe program because they are less likely to produce false alarms due to nuisances such as cooking grease and bathroom steam vapors. Ionization smoke alarms were not chosen because: 1) frequent nuisance alarms will be annoying and will eventually prompt many owners to disconnect the unit; and 2) owners often find it easier to remove the battery than to repeatedly push the silencer button when smoke exposure is sustained, as it is during cooking.

Sleep Safe is more than just another teaching curriculum. The Parent/Childcare Provider’s and Tribal Partnerships Guides were designed to stimulate the development of linkages with other community groups, and mobilization of the community in fire safety using Head Start as the catalyst. The ultimate goal is the development of comprehensive community fire safety programs.

The curriculum was also designed to give a starting point for developing the linkages between community members and tribal and IHS programs needed for a comprehensive community fire safety program. For example, even if the community recognizes that there is a fire injury problem, and the IHS or tribal injury prevention practitioner has technical expertise and can provide leadership, we’re often not sure how to join forces and where to begin to address the problem. The Sleep Safe module provides a means to do this by outlining the basic steps needed to develop an effective fire safety program, and by guiding in the delineation of roles and responsibilities for collaborating individuals and programs.

Recognizing that many AI/AN communities have different needs, challenges, and potential risk factors compared to other communities (Table 1), the Sleep Safe curricula were developed using experience from working with AI/AN communities, input from AI/AN Head Start programs, and advice from community members. The initial planning for this program involved IHS Environmental Health and IHS Head Start representatives meeting to develop an outline for the curricula. The curricula were drafted using a format found in other educational materials used by Head Start, so that familiarity would allow easy application of the Sleep Safe curricula. Activities were developed to meet the following Head Start
Table 1. Potential risk factors for fire mortality in some American Indian/Alaska Native communities

<table>
<thead>
<tr>
<th>Risk Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lack of smoke alarms</td>
</tr>
<tr>
<td>• Inoperable smoke alarms</td>
</tr>
<tr>
<td>• Alcohol impairment, especially while smoking</td>
</tr>
<tr>
<td>• Smoking, especially in bed</td>
</tr>
<tr>
<td>• Low socioeconomic status</td>
</tr>
<tr>
<td>• Lower educational level</td>
</tr>
<tr>
<td>• Living in mobile homes</td>
</tr>
<tr>
<td>• Substandard housing</td>
</tr>
<tr>
<td>• Use of wood stoves</td>
</tr>
<tr>
<td>• Rural location; long response time</td>
</tr>
<tr>
<td>• Cold climate</td>
</tr>
<tr>
<td>• Single parent households</td>
</tr>
<tr>
<td>• Overcrowded households with many children</td>
</tr>
<tr>
<td>• Arson: disaffected youth; unemployment</td>
</tr>
</tbody>
</table>

After the curricula were drafted, three focus groups (3-6 participants each) were held with Arizona Indian Head Start teachers and community members, who had reviewed and applied the materials. The focus group sessions were guided by a facilitator’s manual developed from material in Designing and Implementing Fire Safety Programs in American Indian Communities: A Resource Manual, which, in turn, was developed through an IHS-US Fire Administration collaborative project. Input from the focus groups allowed tailoring of the module to improve clarity, readability, ease of application, content, and activities. The program will be evaluated by site visits and tools developed through an IHS contract with the Injury Prevention Center at the University of North Carolina (UNC).

All Head Start centers serving AI/AN children were eligible to apply for the Sleep Safe program. Requests for proposals were direct-mailed to all eligible Head Start centers and consortiums. Fifteen grantees throughout the United States were selected for the program, which begins in fiscal year 2000. Each grantee sent a designated Sleep Safe coordinator to Albuquerque for a one-day training workshop taught by IHS Injury Prevention Specialists and consultants from the UNC Injury Prevention Center. Participants received training about the intent of the program, and about the application of each of the module’s guides through presentations, group activities, role-playing exercises, and demonstrations. Each coordinator also received a copy of Designing and Implementing Fire Safety Programs in American Indian Communities: A Resource Manual. After completing the workshop, the coordinators returned to implement the curricula and initiate smoke alarm installation. Project sites were encouraged to kick off their programs in the first week of October during Fire Safety Week. It is anticipated that the success of this year’s pilot project will lead to expansion of project sites funded through the US Fire Administration, Head Start, and/or the IHS.

The IHS Injury Prevention Program recognizes that reducing many types of injuries depends on the active involvement of communities. It is devoted to the empowerment of communities to address local injury problems through locally developed solutions. The Sleep Safe program can be used as a model, and as a tool for local groups to use as a starting point for addressing fire injury problems in their community. Although the module is targeted to Head Start programs, the Tribal Partnerships Guide is intended to stimulate community mobilization in fire safety. Although the Sleep Safe program addresses fire injury, the basic framework and approach presented can be applied to other injury problems in a community.

For more information, contact the author at (218) 759-3383, or Harold Cully, IHS Sleep Safe Coordinator, at (405) 951-3852.

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References


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WE’RE MOVING!

The IHS Clinical Support Center will be moving October 22, 1999 from its present location to the following new address:

The IHS Clinical Support Center
Two Renaissance Square, Suite 780
40 North Central Avenue
Phoenix, Arizona 85004

The new phone number will be (602) 364-7777. The e-mail address for The Provider will remain the same, the.provider@phx.ihs.gov. The new fax number will be (602) 364-7788.

While we anticipate interruption of services from Friday, October 22 through Monday, October 25 as we move, we plan to be back to full operation by Tuesday, October 26.
Does New Medical Information Change Practice Behavior?

Jon Hauxwell, MD, Billings Area Indian Health Service, Billings, Montana

As part of an Infectious Disease CME project, we recently offered our Billings Area providers a review article on the use of antimicrobials in acute otitis media (for a commentary on the clinical aspects of this subject, see “Are Antibiotics Indicated for the Treatment of Acute Otitis Media?” in The IHS Provider, Volume 24, Number 8, August 1999, page 124).

Acute Otitis Media (AOM) is the most common reason antibiotics are prescribed in the U.S. Yet this review of controlled trials concludes that research “offers no compelling evidence that children with AOM routinely given antimicrobials have a shorter duration of symptoms, fewer recurrences, or better long-term outcomes than those who do not receive them.”

Evaluations done by our participants following the CME project suggested that they understood the concepts outlined in the article. In general, however, they did not accept those concepts to the extent that they would consider applying them in their own practice. Significantly, rationales for not incorporating these principles into practice virtually never involved challenging or refuting any of the methodology or conclusions.

The implications for CME efforts in general are profound, though hardly novel. Assuming that today’s incremental increases in medical information make changes inevitable, why, then, is factual information so ineffective in persuading practitioners to modify their behavior?

In some cases, new data would seem to conflict with prior formative training or with assumptions extrapolated from that training (“Well, I was taught that...”). Even physicians have difficulty applying critical thinking to entrenched behaviors. We take refuge in the predictable ebb and flow of medical fads; it can be prudent to see how “advances” stand the scrutiny of time and experience. Some see pressure to change as a threat to physician autonomy. We tend to trust our “gut feelings” without examining their antecedents. It’s tempting to dismiss rigorously developed new protocols as “cookbook medicine.”

We commonly fear the medicolegal consequences of deviating from an ill-defined “Standard of Care.” If we think almost everyone else is using a certain approach, we are reluctant to practice differently. So we fall back on the good ol’ “reliable” cookbook!

In individual cases, doctors are trained to act, not merely to observe. We’ve been given an extensive arsenal of pharmaceuticals, for example, and we’re not inclined to leave them on the shelf. Even doctors can subconsciously subscribe to the modern lay myth that “there’s a drug for everything.” Acceptance of that myth leads providers to the perception that nothing will satisfy parents short of an antibiotic for their sick child. In actuality, most parents will accept an empathetic explanation of the child’s condition and the rationale for the proposed management. Isn’t it ironic that we are quick to criticize a peer who can’t refuse an inappropriate request for narcotics, but we run for cover at the suggestion we hold the line on antibiotics?

Providers express a legitimate concern for patient convenience, even if short-term patient safety is shown to be unrelated to antibiotic use. What if they don’t improve soon enough on conservative therapy? What if they worsen? Then they must return to a busy facility, adding to our workload and disrupting their day again. The studies cited indicate that delayed returns may not be prevented by routine use of antibiotics. In any event, the choice could be between a few “unnecessary” visits and a lot of unnecessary antibiotics.

Achieving a consensus on which changes are desirable is not a simple matter. Convincing skeptics and dissidents to respond to persuasive data by changing behavior is more difficult still. Do our medical educators routinely apply educational principles discovered through systematic study? Or do many forge ahead, as we did, on the naive assumption that given compelling data, providers will reflexively alter their practice? Is it time for us to train some trainers to upgrade educational activities within our organization?
Pocket Geriatric Reference Available
Free of Charge

Geriatrics At Your Fingertips, 1998/99 edition

This small (approximately 3 1/2” x 6”) 151 page guide to geriatric care, published by the American Geriatrics Society, is packed full of charts and tables. It is a great clinical pocket reference, portable and practical, containing information about medications, common geriatric problems, and geriatric assessment. Free copies are available for all Indian health program providers caring for the elderly. “I’ve used this handbook in Zuni over the past six months and I’ve found it to be a very useful and handy reference in my care of elderly patients,” says Bruce Finke, MD, Coordinator, IHS Elder Care Initiative.

To receive your complimentary copy, complete the form below and mail or fax it to the IHS Clinical Support Center. Before October 22, 1999, send it to CSC, 1616 East Indian School Road, Suite 375, Phoenix AZ 85016; fax (602) 640-2140. After October 26, 1999, send it to The IHS Clinical Support Center, Two Renaissance Square, Suite 780, 40 North Central Avenue, Phoenix Arizona 85004; fax (602) 364-7788.

This handbook is provided to you by the IHS Elder Care Initiative, Division of Clinical and Preventive Programs, and the IHS Clinical Support Center as part of a continuing effort to promote high quality care for AI/AN Elders.

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Delivery will be in 4 to 6 weeks. Mail or fax to The Clinical Support Center.
NCME VIDEOTAPES AVAILABLE

Health care professionals employed by Indian health programs may borrow videotapes produced by the Network for Continuing Medical Education (NCME) by contacting the IHS Clinical Support Center, Two Renaissance Square, Suite 780, 40 North Central Avenue, Phoenix, Arizona 85004.

These tapes offer Category 1 or Category 2 credit towards the AMA Physician’s Recognition Award. These CME credits can be earned by viewing the tape(s) and submitting the appropriate documentation directly to the NCME.

To increase awareness of this service, new tapes are listed in The IHS Provider on a regular basis.

NCME 752
Doing Right: Clinical Ethics in Primary Care (60 minutes)
For most physicians, clinical ethics is most often associated with critical care medicine. Yet, primary care physicians and family physicians are constantly faced with a variety of ethical problems that require thoughtful solution. These include end-of-life issues, such as discussing advance directives, dealing with demanding patients, disclosing bad news, handling professional conflicts and inappropriate behaviors, and providing adequate pain management. Working in a managed care environment may also adversely affect sound ethical decision-making. In this program, a family doctor, geriatrics specialist, and an ethicist discuss the ethical implications by presenting a typical case encountered in family medicine. They offer strategies for evaluating ethical problems and advice on how to approach these dilemmas. Special attention is also paid to the challenges of clinical ethics in a managed care setting.

NCME 753
Chest Pain of Noncardiac Origin: Evaluation and Management (60 minutes) The patient presents with chest pain and you rule out an underlying cardiac problem. What’s the next step? Illustrated case studies show how to pinpoint and effectively manage chest pain due to selected common - and not so common - noncardiac etiologies.

NATIVE AMERICAN MEDICAL LITERATURE

The following is an updated MEDLINE search on Native American medical literature. This computer search is published regularly as a service to our readers, so that you can be aware of what is being published about the health and health care of American Indians and Alaska Natives.

The Clinical Support Center cannot furnish the articles listed in this section of The Provider. For those of you who may wish to obtain a copy of a specific article, this can be facilitated by giving the librarian nearest you the unique identifying number (UI number), found at the end of each cited article.

If your facility lacks a library or librarian, try calling your nearest university library, the nearest state medical association, or the National Library of Medicine (1-800-272-4787) to obtain information on how to access journal literature within your region. Bear in mind that most local library networks function on the basis of reciprocity and, if you do not have a library at your facility, you may be charged for services provided.


Ring IT, Firman D. Reducing indigenous mortality in Australia:


Walters LL, Tirrell SJ, Shope RE. Seroepidemiology of California and Bunyamwera serogroup (Bunyaviridae) virus infections in native populations of Alaska. *American Journal of Tropical Medicine & Hygiene.* 60(5):806-21, 1999 May. 99274454


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