Public Health Practice and the IHS Injury Prevention Program: Guiding Principles

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Introduction

Injury is a leading cause of death and disability for American Indian and Alaska Native (AI/AN) communities. Overall, unintentional injury is the third leading cause of death among AI/ANs, and suicide and homicide are among the top ten causes of death. Injuries and violence are especially a burden for the young AI/AN population, accounting for 75% of all deaths among those ages 1-19.[1] Unintentional injury, suicide, and homicide are respectively the top three killers among AI/AN 1-44 years old, accounting for 54% of all deaths. Injuries cause more deaths among American Indians and Alaska Natives 1-44 years of age than all other causes combined.[2] In terms of years of potential life lost (YPLL), unintentional injuries account for more YPLL among AI/AN than heart disease, cancer, and diabetes combined.[3]

The IHS Injury Prevention Program (IPP) within the Division of Environmental Health, Office of Environmental Health and Engineering (OEHE), has evolved over the past three decades from a primarily education-based program to a comprehensive, evidence-based prevention program based on proven public health strategies. Several public health models, including the Haddon Matrix (pre-event/event/post-event; host/agenda/environment) and the CDC's National Center for Injury Prevention's "Public Health Approach" (Figure 1) have influenced the development of the IPP.[4] The current IHS Injury Prevention Program, however, is best characterized by four guiding principles: proven or best practice community-based prevention strategies, reliable injury surveillance data, building tribal capacity, and fostering collaborative partnerships (Figure 2).

Community-Based Prevention Strategies

The central focus of the IHS Injury Prevention Program is the implementation of community-based prevention strategies that are evidence-based or "best practices." Dr. Fred Rivara of the Harborview Injury Prevention Research Center has said "the reason for this focus on effective strategies is straightforward: Because staff time and resources are always limited, efforts should be used for those injury prevention strategies that have been evaluated and shown to be effective."[5] Table 1 summarizes injury

Figure 1. Public health approach

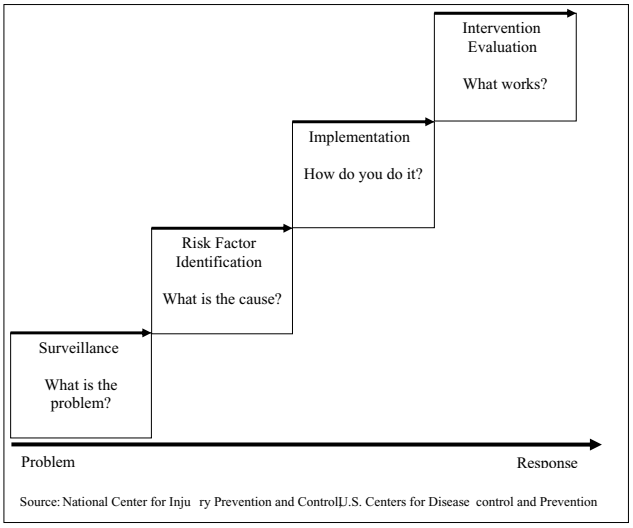

Figure 2. Guiding Principles of the IHS Injury Prevention Program

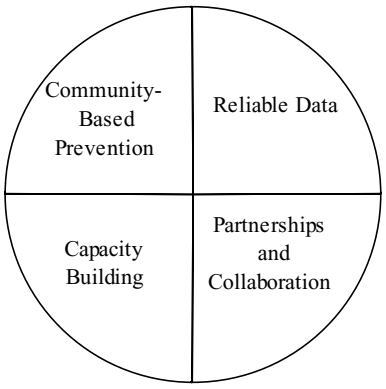

Table 1. Recommended Strategies to Reduce Injury

Mechanism/Type of Injury	*Strategies*	*Key Findings*	*References*
Motor Vehicle Occupants			
Increase Use of Child Safety Seats	Mandatory use laws	Strong evidence. Laws decreased fatal injuries by 35%, but need to be enforced.	17, 18, 19, 20
	Community-wide information + enhanced enforcement campaigns such as checkpoints, saturation patrols	Sufficient evidence. Child safety seat use increased on average 12%. Added benefit of may increase detection of DUI or other offenses.	17, 18, 19, 20
	Distribution of child safety seats + education programs	Strong evidence. Increased use of child safety seats by 23%.	17, 18, 19, 20
Increase Use of Safety Belts	Mandatory use laws	Strong evidence. Laws increased safety belt use by 33% compared to states with nolaw. Primary enforcement laws on average increase safety belt use by 14% compared to Secondary laws.	18, 19, 20, 21
	Enhanced enforcement programs	Strong evidence. Enhanced enforcement, such as "Click it or Ticket" campaigns increased safety belt use on average by 16 percentage points. Added benefit of may increase detection of DU I or other offenses.	18, 19, 20, 21
Protect Young Drivers	Graduated driver licensing systems	Strong evidence. Median decrease in young driver crash rates in the first year was 31%	20, 22
	Nighttime driving restriction curfews	Most fatal nighttime crashes among young drivers occur between 9 PM and midnight. Seve ral studies from the US and Canada have found that ordinances that restrict unsupervised teen driving at night resulted in reducing teen driver fatalities by about 25%.	22
Reduce Alcohol-Impaired Driving	0.08% blood alcohol concentration (BAC) laws	Strong evidence. States that lowered their BAC laws from 0.1% to 0.08% saw a median decrease in alcohol-related fatal motor vehicle crashes of 7 %.	18, 19, 20, 23
	Zero tolerance laws for minors	Sufficient evi dence. Lower BAC limits for young and inexperienced drivers has been shown to reduce crash rates.	18, 19, 20, 22, 23
	Sobriety checkpoints	Strong evidence. Proven effective in reducing alcohol-related crashes and deaths by approximately 17-25%. Recommended to be a partof all police enforcement programs.	18, 19, 20, 22, 23
	School-based programs	Recommended to reduce riding with a drinking driver, but insufficient evidence to determine if effective in reducing alcohol-impaireddriving .	19, 20
	Mass media campaigns to reduce alcohol-impaired driving	Strong evidence. Studies have found robust mass media campaigns to reduce alcohol-related crash rates by about 13%.	19, 20
	Designated driver programs	In sufficientevidence to determine effectiveness	19, 20
Fire and Burns			
Reduce residential fire deaths/injuries	Install smoke alarms	Effective strategy. Re searchers have found that having a working smoke alarm in the home reduced the risk of death from a house fire by asmuch as 71%. Research conducted in Native American homes recommended installing photoelectric alarms in place of ionization alarms to prevent nuisance alarms.	24, 25, 26
	Smoke alarm distribution + education and media campaigns	Effective strategy. Mallonee and others found that fire injury rates were reduced by up to 80% after targeting high risk neighborhoods w ith smoke alarm distribution combined with an education and media campaign.	24, 27
Reduce thermal burns	Reduce hot water temperatures to 120 degrees F or less	Legislation and ordinances to require hot water heaters be preset at 120 degrees F has proven to be the most effective in reducing scald b urns to young children and older adults. Media campaigns and home visits are also effective in getting homeowners to measure and reduce hot water temperatures to 120 degrees F. Educational campaigns alone have not been effective.	24, 29
Drowning			
Reduce drowning in natural bodies of water	Programs to promote wearing of personal flotation devices (PFDs), floatation coats	PFD and float coat education and distribution programs are promising strategies to increase the use of these safety devices in Alaska Native villages.	24, 29, 30
Reduce swimming pool drowning	Install 4-sided fencing around pools	Installing four-sided isolation fencing around swimming pools is a proven effective strategy in preventing drowning among children from birth to 5 years.	24, 30
Falls			
Prevent falls among older adults	Exercise programs to improve balance, leg strength, and endurance	Exercise programs for older adults have been shown to reduce the risk of falls by 12% and mean number of falls by 19%. The most effective programs have targeted balance, leg strength, gait training, and strength building.	31

Table 1. cont.

	Clinical assessment and fall risk reduction	Individual patient assessment of fall risk factors combined with strategies to reduce those risks have been shown to reduce the risk of falls by 18%.	31
	Medication management	Studies have sh own that reviewing and modifying medications that are known toincrease the risk of falls, such as benzodiazepines, antidepressants, etc., have been shown to reduce fall ra tes. These programs have been more effective when combined with other strategies, such as risk factor screening, exercise programs, and home assessment.	31, 32
Violence			
Reduce child maltreatment	Early childhood home visitation programs	Strong evidence. Early ho me visitation for new mothers is a proven effective strategy to reduce child abuse and neglect in young children. Researchers have found a 39% to 80% reduction in reported child abuse and neglect among children who received the home visit intervention vs. controls.	33, 34, 35, 37
Reduce suicide	Physician educati on in depression recognition and treatment	Effective strategy. A majority of older adults who die by suicide are seen by a primary care physician in the last few months of life. Physician education in depression recognition and treatment is an effective strategy to prevent suicides.	36, 38
	Restrict access to lethal means	Researchers ha ve found that having firearms in the home increases the risk of suicide by up to 4 times for all ages, and 10 times for youth. Restricting access to firearms for youth especially is a promising strategy to prevent suicides.	24, 36, 38
	Increasing protective factors such as discussion of problems with relatives and friends, building self-esteem, and increasing problem solving skills.	The Zuni Life Skills Dev elopment program has shown promising results in reducing suicide rates among American Indian/Alaska Native youth by focusing on increasing protective factors and reducing known risk factors for high school aged youth.	38, 39, 40

prevention interventions that have rigorously-demonstrated effectiveness or are at least considered promising. Knowledge of these interventions, however, is not enough for their successful implementation in AI/AN communities. Interventions must be tailored for each community. Successful implementation of effective strategies tailored to each AI/AN community involves important considerations, including the following:

1. Every community has unique cultural, political, and historical factors that must be recognized and respected.[6, 7, 8]
2. Tribes are sovereign nations. Tribal entities must be involved in all stages of program planning and implementation.
3. Priorities for intervention need to be based on reliable injury data, feasibility, and the expressed concerns of the community.

Another important guideline for implementing community-based interventions is utilizing multiple strategies where possible. Because there are multiple factors that contribute to an injury event and injury severity, we advocate that an intervention employ the "3Es" model. This model involves three intervention approaches:

- *Education* to raise awareness of injury risks, encourage behavior changes, and to inform policy makers so they have the knowledge for more informed decisions
- *Enforcement* of legal requirements and prohibitions to reduce risk; policy development
- *Engineering* (or Environmental Modification) to create a safer environment or safer consumer products.[4]

The basic premise of the 3-Es model is that an intervention utilizing a combination of these approaches produces results superior to an intervention employing only one approach. For example, a community-based program focused to reduce motor vehicle crash (MVC) injuries might ideally include:

- Education approaches to encourage occupant restraint use and inform policy makers of community specific MVC risk factors and intervention strategies
- Enforcement approaches involving the enactment and enforcement of key traffic safety laws that require occupant restraint use and prohibit drinking and driving
- Engineering of community roads to ensure they are sufficiently designed and maintained to minimize crash risk.

The CDC-funded motor vehicle prevention program at the San Carlos Apache Tribe is a superb example of a community-led program employing effective strategies (sobriety checkpoints, strengthening traffic safety laws), education (primarily through mass media), and enforcement.[9, 10]

Reliable Data

Reliable data are vital to drive decisions for the development of a targeted, community-based injury prevention program. Data help identify the distribution and determinants of injuries in a community; provide insight into the knowledge, attitudes, and perceptions of community members about specific topics and approaches; enable evaluation of intervention strategies; and support efforts to fund, sustain, and enhance successful interventions. The IPP employs several strategies to help tribes

describe the magnitude of the injury problem and identify injury trends in their community.

National sources for AI/AN injury data include IHS Headquarters, the Centers for Disease Control and Prevention, and other injury data sources where AI/AN populations are identified. IHS Headquarters' publications, such as the *Indian Health Focus – Injuries 2000-2001*, *Trends in Indian Health,* and *Regional Differences in Indian Health* are useful in providing a basic description of injuries nationally and for each IHS Area. The CDC's Web-based Injury Statistics Query and Reporting System (WISQARS) is an interactive database system we use to provide customized reports of AI/AN injury-related data and make comparisons to other US races.[2]

National data resources are useful in describing the magnitude of injury among AI/ANs and to track trends, but are limited to large sub-groups of the AI/AN population such as IHS Areas or states. As a result, the IHS IPP works with tribes and tribal organizations to gather local data that are representative of specific AI/AN communities. Following a 1985 consultation from injury prevention epidemiologist Leon S. Robertson, PhD, of Yale University, the IHS Injury Prevention Program embarked on the enormous and ongoing task of establishing injury surveillance systems in AI/AN communities.[10] IHS Environmental Health Officers and Injury Prevention Coordinators are generally responsible for local injury surveillance systems that involve the review of health care data (i.e., ED logs, medical records, contract health billing records, ambulance services). These data are also often supplemented by reports from police departments, state vital statistics, injury site investigations, and other sources. The data are summarized by IHS and used by IHS and the tribes to better understand the leading causes of injury in communities; compare the burden of injury to other health priorities; and plan targeted interventions. At the request of, and in partnership with, tribes, we have conducted numerous special injury epidemiologic studies to understand injury problems in greater detail. Many of these studies have been conducted by participants in the IHS Fellowship program.[11] These studies have provided detailed analysis and intervention recommendations to address many types of injury, including motor vehicle crashes (including pedestrian), falls, drowning, fires/burns, suicide, and assault.

An emerging data collection strategy of our program involves the collection of quantitative data. The IHS IP program staff in collaboration with tribes has conducted focus groups, key informant interviews, and community surveys that are fundamental to tailoring programs/interventions to the community.

Capacity Building

One of the core objectives of the IPP is to build capacity within tribal communities to effectively address the issue of injury. Capacity building involves initiatives to foster tribal ownership of injury prevention programs, from identifying priorities to implementing and evaluating injury prevention initiatives. Capacity building efforts focus on 1) training to increase injury prevention skills among IHS and tribal public health practitioners, policy makers, and community advocates; 2) funding to implement community-based intervention programs; and 3) providing expert technical assistance to tribes in injury prevention program development, implementation, and evaluation.

Training. The IPP includes a comprehensive Injury Prevention training program that offers a broad set of courses for varied levels of experience and injury topics. Our curriculum includes three, one-week short courses that gradually build on one another across seven core injury prevention topics: public health approach to injury prevention, program design and implementation, coalitions and collaborations, program evaluation, injury data, marketing and advocacy, and program management. These short courses, designed and taught by IHS and tribal injury prevention staff, are intended to build practical injury prevention skills for the diverse group of persons working and living in tribal communities.

We offer a year-long injury prevention fellowship program for advanced training. The fellowship program currently has two tracks: an epidemiology track geared to conduct community-based injury studies and a program development track geared to implement community-based interventions and programs. Over 200 IHS and tribal persons have graduated from the fellowship since it began in 1987.[12] We also offer targeted training in topics such as child passenger safety, grant writing, program evaluation, and intentional injuries.[95] The Safe Native American Passengers (SNAP) course is an excellent example of the IPP recognizing the need for more focused training on Child Passenger Safety (CPS). SNAP delivers culturally-appropriate CPS education to affect the knowledge, attitudes, and practices of those responsible for transporting children in motor vehicles.

Funding IP Initiatives. Securing sufficient funding to implement community-based injury prevention programs and interventions is critical to successful capacity building. The most significant source of IHS funds for developing the capacity of AI/AN tribes and tribal organizations is the IHS Tribal Injury Prevention Cooperative Agreement Program (TIPCAP). Initiated in 1997, TIPCAP provides varying levels of funding to tribes to facilitate injury prevention program development, implement interventions, and conduct injury prevention conference activities. Over the past decade approximately $13.4 million has been awarded to 51 tribes/tribal organizations to develop community-based injury prevention programs, including the employment of a full-time tribal injury prevention coordinator. Currently there are 32 TIPCAP-supported tribal injury prevention programs ranging in funding from $50K-$75K per year for the 2005-2010 award cycle.[13]

IHS IPP funds also support targeted intervention initiatives. Two examples are the Sleep Safe and Ride Safe Programs that address childhood fire burn injury and child passenger safety, respectively, in AI/AN communities. Since 1999, these programs have resulted in the distribution of over 20,000 smoke alarms and over 3,500 child safety seats. Several other targeted injury topics (e.g., suicide, falls, impaired driving) are addressed through mini-project programs funded by Area Injury Prevention Programs.[14,15]

Technical assistance. The most valuable resource the OEHE

program has to offer tribes is the time and expertise of its staff. OEHE field staff serves as the primary injury prevention advisors to tribes. They are supported by the IPP at the District, Area, and national levels. They provide technical assistance to tribes in IP program planning, implementation, and evaluation. Staff also play a critical role in assisting tribes in obtaining external funding for intervention projects and programs. For example, in 2006, the Phoenix Area IPP assisted tribes in obtaining over $600,000 from funding sources outside of IHS to develop community-based IP programs.

The IPP has also provided technical assistance to tribes through contracts with external consultants. The experience of injury prevention experts from the University of North Carolina in providing technical assistance to tribes with TIPCAP programs, for example, has been described in the July 2007 issue of *The Provider*.

Partnership Building

One of the many ways the IPP achieves success is through strong partnerships and collaborations with other entities. Maintaining these relationships have proven to increase the efficiency and effectiveness of the programs initiatives. These partnerships have been established at the national, local, and internal levels.

The IPP has partnered with many national, external programs to include the Centers for Disease Control and Prevention (CDC), US Fire Administration (USFA), Bureau of Indian Affairs (BIA), and the National Highway Transportation Safety Administration (NHTSA). Partnerships with these programs have helped bridge the gap between research and policy making, and the local communities that are affected by them. Two good examples of this are the CDC's Tribal Motor Vehicle Injury Prevention program and the USFA's Sleep Safe Program. To address the disparity of motor vehicle-related injuries among AI/AN, CDC began funding four tribes in fall 2004 to design, implement, and evaluate evidenced-based strategies to reduce alcohol-impaired driving and increase occupant restraint use. The goals of this CDC-tribal initiative are to determine if the effective strategies from the *Community Guide* can be successfully tailored to tribal communities and to identify the key components of successful tribal intervention programs as a model for other tribes wishing to reduce the toll from motor vehicle crashes. These projects have already seen numerous successes including passage of two primary enforcement seatbelt laws, substantial increases in seatbelt use, and reductions of alcohol-impaired driving.[9]

The Sleep Safe Program is another example of how the IPP has helped facilitate a national initiative at the community level. The goal of the Sleep Safe Program is to reduce the rate of fire and burn injuries among AI/AN Head Start children by providing a curriculum for program development and parent/student education, and smoke alarms for installation. The USFA provides the smoke detectors and other related equipment while the IPP staff help facilitate the implementation at the local Head Start level.

The IPP has also formed relationships with internal programs including health promotion/disease prevention, behavioral health, public health nursing and others. While sharing the IHS mission with these other internal programs, these relationships capitalize on the strengths of the various programs to achieve their goals and objectives while reducing the amount of overlap. While many of these programs have budgeted for injury prevention objectives, they may not have enough staffing or injury prevention training to meet them. The IPP's most abundant resource is a cadre of highly trained staff able to assist these programs with the planning, coordination, and implementation of proven effective intervention strategies.

Collaborations at the local level are vital for the successful implementation of interventions. These collaborations not only increase the efficiency of the implementation but they also provide for community buy-in and capacity building. One of the key components to a successful community injury prevention program is coalitions. Community health representatives (CHR), housing programs, tribal health departments, police departments, and elder programs are just a few of the local organizations that actively participate in coalition activities.

Conclusions

The four guiding principles of the IHS Injury Prevention Program underlie its mission: "To raise the health status of American Indians and Alaska Natives to the highest possible level by decreasing the incidence of severe injuries and death to the lowest possible level and increasing the ability of tribes to address their injury problems."[16] These principles commit the Injury Prevention Program not to a static model of public health, but to a process of community change. That process acknowledges the power of partnerships and collaboration to build and sustain programs over time. It emphasizes the importance of reliable data and evidence-based strategies in designing and implementing interventions. And it identifies community needs and community ownership as the foundation for all programmatic efforts.

References

1. Wallace LJD, Patel R, Dellinger A. Centers for Disease Control and Prevention. Injury mortality among American Indian and Alaska Native Children and Youth – United States, 1989-1998. *MMWR*. 2003;52:697-701.
2. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS): Cause of death reports. Accessed on June 19, 2007 at *http://www.cdc.gov/ncipc/wisqars/default.htm*.
3. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control: Web-based Injury Statistics Query and Reporting System (WISQARS): YPLL. Accessed on July 23, 2007 at *http://www.cdc.gov.ncipc/wisqars/default.htm.*
4. Chistoffel T, Gallagher S. Injury Prevention and Public Health: Practical Knowledge, Skills, and Strategies 2nd Ed. Sudbury, MA: Jones and Bartlett; 2006.
5. Rivara F, Thompson D, Beahler C, MacKenzie EJ (editors).

Systematic Reviews of Strategies to Prevent Motor Vehicle Injuries. *Am J Prev Med.* 1999;16(15).
6. Grossman DC, Putsch RW, Inui TS. The meaning of death to adolescents in an American Indian community. *Family Medicine.* 1993; 25(9):593-7.
7. Berger LR: A combination of traditional wisdom and public health could help. *Western Journal of Medicine*. 1999;171(1):14-15.
8. Yazzie R. Life Comes From It: Navajo justice. Accessed on June 21, 2007 at *http://www.context.org/ICLIB/IC38/Yazzie.htm*.
9. Reede C, Piontkowski S, Tsatoke G. Using evidence-based strategies to reduce motor vehicle injuries on the San Carlos Apache Reservation. *The IHS Primary Care Provider.* 2007; 32:209-212.
10. Roberson L. Epidemiologic Assessment of the Contributing Factors of Injury Mortality and Morbidity Among Native Americans. July 1985 (Final Report to IHS).
11. Indian Health Service Injury Prevention Fellowship – Compendium of Project Papers 1987-1998. Accessed on June 29, 2007 at *http://www.injuryfellowship.org*.
12. Berger L, Williams, D, Bill N. The IHS Injury Prevention Fellowship Program: A long-term evaluation. *The IHS Primary Care Provider.* 2007; 32(2): 38-42.
13. Letourneau R, Crump C. The role of technical assistance in the IHS Tribal Injury Prevention Cooperative Agreements Program (TIPCAP): Enhancing injury prevention capacity among tribes and tribal organizaitons. *The IHS Primary Care Provider*. 2007; 32:218-222.
14. Kuklinski DM, Cully H. The Bemidji Area IHS Sleep Safe Program: Increasing smoke alarm usage in American Indian Head Start homes. *The IHS Primary Care Provider*. 2007;32:213-217.
15. Kuklinski DM. Personal communication, July 2007.
16. Indian Health Service (IHS) Injury Prevention Program. Accessed on July 13, 2007 at: *http://www.ihs.gov/MedicalPrograms/InjuryPrevention/index.cfm*.
17. Zaza S, Sleet DA, Thompson RS, et al. Task Force on Community Preventive Services. Reviews of evidence regarding interventions to increase use of child safety seats. *Am J Prev Med.* 2001;21(4S):31-47.
18. Motor-Vehicle Occupant Injury: Strategies for Increasing Use of Child Safety Seats, Increasing Use of Safety Belts, and Reducing Alcohol-Impaired Driving. A Report on Recommendations of the Task Force on Community Preventive Services. *MMWR.*. 2001;50(No.RR-7) (2) Accessed on July 13, 2007 at: http://www.cdc.gov/mmwr/PDF/rr/rr5007.pdf
19. Task Force on Community Preventive Services *Guide to Community Preventive Services, Motor Vehicle Occupant Injury* Accessed on July 13, 2007 at http://www.thecommunityguide.org/mvoi/default.htm
20. Dellinger AM, Sleet DA, Shults RA, Rinehart CF. Interventions to Prevent Motor Vehicle Injuries. In: Hass EN, Doll LS, Bonzo SE, Sleet DA, Mercy JA, eds. *Handbook of Injury and Violence Prevention*. New York: Springer; 2007: 55-79.
21. Dinn-Zarr TB, Sleet DA, Shults RA, et al. Task Force on Community Preventive Services. Reviews of evidence regarding interventions to increase use of safety belts. *Am J Prev Med* 2001;21(4S):48-65.
22. Systematic Reviews of Strategies to Prevent Motor Vehicle Injuries. *American Journal of Preventive Medicine*. 1999; 16(1S) (3).
23. Shults RA, Elder RW, Sleet DA, et al. Task Force on Community Preventive Services. Reviews of evidence regarding interventions to reduce alcohol-impaired driving. *Am J Prev Med.* 2001;21(4S):66-88.
24. *Systematic Reviews of Childhood Injury.* Harborview Injury Prevention Research Center. Accessed on July 13, 2007 at: *http://depts.washington.edu/hiprc.*
25. Runyan CW, Bangdiwala SI, Linzer MA, Sacks JJ, Butts J. Risk factors for fatal residential fires. *New England Journal of Medicine*. 1992; 37(12).
26. Kuklinski DM, Berger LR, Weaver JR. Smoke detector nuisance alarms: a field study in a Native American community. *NFPA Journal*. 1996; September.
27. Mallonee S, Istre GR, Rosenburg M, Reddish DM, Jordan F, Silverstein P, Tunell W. Surveillance and prevention of residential-fire injuries. *New England J of Medicine*. 1996; 335(1): 27-31.
28. Injury Prevention Policy, Tap Water Scalds: *http://www.safetypolicy.org/pm/scald.htm.*
29. Alaska Department of Health and Social Services, Injury Prevention and Emergency Medical Services. *Kids Don't Float Program*. Accessed on July 13, 2007 at: *http://www.hss.state.ak.us/dph/ipems/injury_prevention/kids_dont_float.htm.*
30. Quan L, Bennett EE, Branche CM. Interventions to Prevent Drowning. In: Hass EN, Doll LS, Bonzo SE, Sleet DA, Mercy JA, eds. Handbook of *Injury and Violence Prevention*. New York: Springer; 2007: 81-96.
31. Rubenstein LZ, Stevens JA, Scott V. Interventions to Prevent Falls Among Older Adults. In: Hass EN, Doll LS, Bonzo SE, Sleet DA, Mercy JA, eds. *Handbook of Injury and Violence Prevention*. New York: Springer; 2007: 37-53.
32. Tinetti ME, Baker D, McAvary I, Claus E, Garrett B, et al. A multifactorial intervention to reduce the risk of falling among elderly people living in the community. *New England J of Medicine.* 1994;331:821-827.
33. Olds DL, Henderson CR Jr, Chamberlin R, Tatelbaum R. Preventing child abuse and neglect: a randomized trial of nurse home visitation. *Pediatrics*. 1986; 78(1): 65-78.
34. Olds DL, Robinson J, Pettitt L, et al. Effects of home visits by paraprofessionals and by nurses: age 4 follow-up results

of a randomized trial. *Pediatrics*. 2004; 114: 1560 - 1568.
35. Hahn RA, Bilukha O, Crosby A, et al. First reports evaluating the effectiveness of strategies for preventing violence: early childhood home visitation: findings from the Task Force on Community Preventive Services. *MMWR Recommendations and Reports*. 2003;52/RR-14.
36. Mann JJ, Apter A, Bertolote J, et al. Suicide prevention strategies: A systematic review. *JAMA*. 2005;294:2064-2074.
37. Therapeutic Foster Care for the Prevention of Violence: A Report on Findings. *MMWR Recommendations and Reports* 2004; 53 (No. RR-10). *http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5310a1.htm*
38. Knox KL. Interventions to Prevent Suicidal Behavior. In: Hass EN, Doll LS, Bonzo SE, Sleet DA, Mercy JA, eds. *Handbook of Injury and Violence Prevention*. New York: Springer; 2007: 183-201.
39. Borowsky IW, Resnick MD, Ireland M, Rlum RW. Suicide attempts among American Indian and Alaska Native youth: risk and protective factors. *Arch Pediatric Adolesc Med* 1999;153:573-80.
40. LaFromboise TD. The Zuni life skills development curriculum: description and evaluation of a suicide prevention program. *J Counseling Psychology* 1995;42:479-486.