
Suicide Prevention: The Role of the IHS Environmental Health Officer

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Background

Suicide is a serious public health problem in tribal communities nationwide. Between 1999 and 2006, suicide was the second leading cause of death for American Indians and Alaska Natives (AI/AN) ages 10 - 34 and the 8th leading cause of death overall, resulting in 2,746 deaths. The suicide rate for AI/AN ages 10 - 44 was 15.63 between 1999 and 2006, which is nearly 1.5 times higher than the rate for all US races. In terms of years of potential life lost (YPLL), suicide completions resulted in 88,657 YPLL between 1999 and 2006 among AI/AN.¹ The AI/AN suicide rate varies widely by state, as demonstrated in the map in Figure 1.

While these numbers are sobering, it is likely they are under-reported. Multiple studies have addressed the issue of racial misclassification of AI/AN on death certificates;^{2,3} one study found suicide deaths were particularly underestimated among AI/AN living in Montana.⁴

A combination of individual, relational, community, and societal factors contribute to the risk of suicide. Risk factors for suicide include a previous attempt(s), history of alcohol and substance abuse, easy access to lethal means, loss, and local epidemics of suicide. A comprehensive list of suicide risk factors and protective factors can be found at the Centers for Disease Control and Prevention website.⁵

The stigma surrounding suicide has deep roots in many tribal communities. Stigma can prevent those who need mental health care from seeking it, increasing the risk for suicide.⁶ Also, stigma can make prevention efforts difficult in communities where it exists. If a community is unwilling to discuss or acknowledge the issue of suicide, then there may be resistance to any prevention efforts proposed. Some communities have extreme protective custody laws, further complicating help-seeking and the timely provision of appropriate care. Stigma is also evidenced in the fact that homicide is often viewed as a larger problem than suicide, but between 1999 and 2006, there were 836 more deaths by suicide than homicide among AI/AN.¹ Multiple studies have

documented the importance of stigma reduction as a part of a comprehensive suicide prevention program.⁷⁻⁹ The lack of confidentiality that exists in some small communities can cause individuals to not seek treatment for behavioral health issues.

Compounding the problem is a lack of behavioral health providers in Indian Country. Many of the Indian Health Service (IHS), tribal, and urban mental health programs do not have enough staff to operate 24 hours a day and 7 days a week.¹⁰ Out of 242 tribal health centers nationwide, ten percent (10%) noted no mental health services were provided at all.¹¹ A study released in 2000 indicated there was only one children's mental health provider for every 25,000 Indian children.¹² IHS does not have a current vacancy rate for behavioral health providers, but acknowledges that, anecdotally, there is a shortage.¹³ These figures indicate a clear need for additional mental health providers in Indian Country.

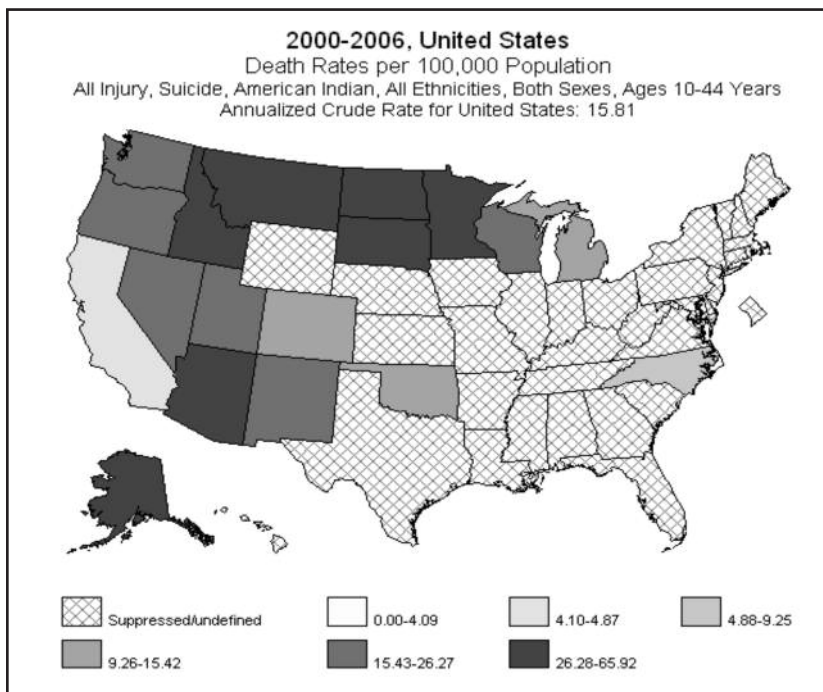
Because of this shortage it is likely the majority of behavioral health providers are only able to focus their efforts on treatment of behavioral health disorders, leaving little or no time to work on community-based prevention activities. Due to this shortage, providers may be reluctant to initiate or get involved with prevention activities.

IHS developed a Suicide Prevention work plan whose purpose is to develop, advocate for, and coordinate a comprehensive cultural-and community-based approach to reduce suicidal behaviors and suicides in AI/AN communities.¹⁴ The work plan follows, in many aspects, the National Strategy for Suicide Prevention, which is a national initiative to reduce the impact of suicide and suicidal behaviors. The work plan outlines several objectives in the area of awareness, interventions, and methodology; and lists the following goals:

- Promote awareness that suicide is a public health problem that is preventable;
- Implement training for recognition of at-risk behavior and delivery of effective treatment;
- Develop and promote effective clinical and professional practices;
- Develop and implement community-based suicide prevention programs;
- Promote and support research on suicide and suicide prevention;
- Improve and expand surveillance systems; and
- Implement best practices.

This list clearly indicates the need for collaborative

Figure 1. Map of suicide rates by state, AI/AN, ages 10 - 44, 2000 - 2006



Reports for All Ages include those of unknown age.
 * Rates based on 20 or fewer deaths may be unstable. States with these rates are cross-hatched in the map (see legend above). Such rates have an asterisk.

Produced by: Office of Statistics & Programming, National Center for Injury Prevention & Control, CDC. Data Sources: NCHS National Vital Statistics System for numbers of deaths; US Census Bureau for population estimates.

partnerships between clinical and community/public health disciplines. IHS Environmental Health Officers (EHOs) should be active participants in this effort, as they are uniquely qualified through their education and experience in community-based injury prevention initiatives.

EHOs Role in Injury Prevention

EHOs working in injury prevention (IP) seems an oddity to many people in the field of environmental health. Yet, most EHOs in IHS are involved in IP at some point in their careers. This role dates back to the mid to late 1980s with the development of severe injury surveillance systems and injury prevention training sponsored by the IHS Office of Environmental Health and Engineering (OEHE) Division of Environmental Health Services (DEHS). The DEHS program is divided into three distinct components: general environmental health, institutional environmental health, and injury prevention. Even the mission of the IHS DEHS, to “reduce and eliminate environmentally related disease and injury” establishes injury prevention as an inherent responsibility of all IHS EHOs.

The IHS IP Program is embodied by four guiding principles: evidence-based community prevention strategies,

reliable injury surveillance data, building tribal capacity, and fostering collaborative partnerships. Several public health models, including the Haddon Matrix (pre-event/event/post-event; host, agent/environment) and the CDC’s National Center for Injury Prevention’s “Public Health Approach” (surveillance, risk factor identification, implementation, and intervention evaluation) have influenced development of the guiding principles.¹⁵ To ensure staff knowledge and competency, the IP Program at the Headquarters and Area levels have provided support for injury-specific training (i.e., three short courses, as well as a year-long Injury Prevention Fellowship), technical assistance and support from IHS injury experts (i.e., Area Injury Prevention Specialists and District IP Coordinators), and opportunities for project development and implementation. These extensive resources, along with the fact that EHOs work in the local community, prepare them to serve such injury prevention roles as injury prevention practitioners, technical experts, facilitators and/or supporters of community coalitions, project officers for IHS-awarded tribal injury prevention cooperative agreements, data collectors, and technical advisors for grant writing.

IHS EHOs have made considerable contributions to the field of unintentional injury prevention, including fire prevention, motor vehicle safety, drowning prevention, and pedestrian safety.¹⁶⁻¹⁹ EHO work in intentional injury has not been as widespread, and there are only a few articles detailing such work. Examples include retrospective studies of severe assault injury, efforts to reduce bullying, suicide intervention training, and reducing access to firearms.²⁰⁻²⁵ EHOs have the potential to contribute more extensively to the prevention of intentional injury, specifically suicide prevention.

EHOs Role in Suicide Prevention

The number of EHOs currently involved with suicide prevention is relatively small. Nevertheless, EHOs have already made important contributions to the field of suicide prevention in Indian Country (Table 1). Many of the key elements in designing interventions to prevent unintentional injuries also apply to intentional injuries: forming partnerships, providing technical assistance, identifying effective strategies and tailoring them to the needs of individual communities, and collecting data. Partnerships are essential in suicide prevention. EHOs have extensive experience in coalition building and forming partnerships. EHOs can provide technical assistance to tribes that are currently addressing suicide prevention or would like to become involved in suicide prevention. Technical assistance includes assistance with grant

Table 1. EHOs Contributions to Suicide Prevention

<p>Training, coalition building, and partnerships</p>	<ul style="list-style-type: none"> • EHOs partnered with the State of Nevada Office of Suicide Prevention to collaborate on suicide prevention activities such as awareness, gatekeeper training, and a phone text pilot program at a tribal school. • EHOs are involved in several tribally-based suicide prevention coalitions and task forces in Nevada, Utah, and Alaska. These coalitions have been successful in engaging the clinical staff and starting community dialogue about suicide. • Partnered with the University of Nevada Las Vegas to facilitate focus groups at a tribal School. The data collected was used to drive suicide prevention activities at the school.
<p>Project design, implementation and evaluation</p>	<ul style="list-style-type: none"> • Implementation of an Applied Suicide Intervention Skills Training program in northwest Alaska. • Assistance with development and submission of a tribal-based Garret Lee Smith Suicide Prevention proposal, which resulted in an award of \$1.5M for suicide prevention for tribes in Nevada. • Providing technical assistance to tribes in Nevada who were awarded funding from the IHS Meth and Suicide Prevention Initiative (MSPI). • Implementing a safe firearm storage program in Alaska. • Assisted tribes who applied for funding for Phoenix Area Injury Prevention Demonstration Projects related to suicide prevention. Resulted in over \$40,000 awarded to tribes to implement suicide prevention interventions.
<p>Data collection and assessment</p>	<ul style="list-style-type: none"> • Provided suicide data for tribes applying for Area Injury Prevention Demonstration Projects and a Garret Lee Smith Suicide Prevention Grant. • Working to improve suicide surveillance for a tribe in Utah.
<p>Policy development</p>	<ul style="list-style-type: none"> • Currently working with a tribe in Utah to repeal a tribal ordinance in which a suicide attempt is punishable by jail time or fines.

formulation, developing goals and objectives for suicide prevention projects, and advice on the choice and implementation of best-practice suicide prevention interventions. Within the IHS, EHOs have taken the lead in injury surveillance for many years. Surveillance data have been provided to tribes to guide injury prevention activities and support funding proposals. Suicide data should be included in routine injury surveillance, and EHOs can work with tribes to increase the quality of suicide data.

Intentional injuries occur in predictable patterns, just as unintentional injuries do. Public health models used in unintentional injury prevention can also be applied when designing interventions to prevent suicide. In fact, the National Strategy for Suicide Prevention advocates for a public health approach to suicide prevention, and the Suicide Prevention Resource Center (SPRC) (which provides support, training, and resources to assist organizations and individuals to develop suicide prevention programs, interventions, and policies) has developed guidelines for using the public health approach specifically to address suicide.^{26,27} This application of the public health approach is not radically different from

what EHOs are currently using to address unintentional injuries. However, it is important to remember that suicide is the outcome of extremely complex circumstances. While most public health approach steps apply when designing an intervention, not all interventions are straightforward, as is the case when addressing unintentional injuries.²⁸

Despite the numerous similarities between suicide prevention and unintentional injury prevention, there are a few differences. In suicide prevention, progress in implementing interventions is slower compared to unintentional injury prevention. In communities that have been impacted by suicide, emotions can sometimes impede prevention activities. Also, more consideration should be given to cultural and spiritual elements when addressing suicide prevention as compared to unintentional injury prevention.

Many EHOs are reluctant to become involved in suicide prevention. They may see suicide prevention as the exclusive purview of the behavioral health/mental health profession. They may share the fear and stigma surrounding suicide, and prefer to distance themselves from the issue, or accept the myth that talking about suicide promotes suicidal thoughts and

actions. Some feel that their lack of specific knowledge of suicide-related terminology, data sources, and best practices makes them unsuitable to participate in prevention efforts. Finally, even if they are interested in participating in prevention efforts, they lack the support of supervisors who don't accept intentional injuries as a legitimate or high-priority subject for environmental health officers.

Some EHOs lack adequate training in behavioral health, but if suicide is viewed as a public health problem – and not solely a behavioral health one – EHOs are well equipped to work in the field of suicide prevention. EHOs can attend training to become better prepared to work in the field of suicide prevention. Gatekeeper training is an excellent avenue for EHOs to take their first steps into the field. The workshops convey information about suicide terminology, risk and protective factors, and suicide prevention best practices; and provide skills training to recognize, support, and refer individuals at risk of suicide. Well-established gatekeeper training programs include SafeTALK; Applied Suicide Intervention Skills Training (ASIST); and Question, Persuade, and Refer (QPR).²⁹⁻³¹ Suicide prevention content can also be incorporated into the IHS IP program's "short courses" on injury prevention, and is offered in the form of free, on-line workshops sponsored by the NCSPT and SPRC. These trainings not only help EHOs to become more comfortable with the issue of suicide, but also give them valuable knowledge when working with tribes on suicide prevention initiatives.

Suicide is a complex public health problem that will likely be unresponsive to one-dimensional prevention strategies.²⁸ Multifaceted approaches that encompass all three strategies of

suicide prevention (universal, selective, and indicated) are preferred. Examples of best practices in suicide prevention can be found at the SPRC website and in an article published by the Journal of the American Medical Association titled: "Suicide Prevention Strategies: A Systematic Review".^{32,33} Table 2 lists suicide interventions broken down by strategy. Furthermore, since suicide is such a complex issue, the expertise of many professional and community members is needed to address suicide. While most collaborations are community-based, successful collaborations have also been school- and clinic-based. Table 3 lists potential collaborators in a suicide prevention coalition or task force.

Conclusion

Suicide is a serious public health problem that should not be ignored by public health professionals. EHOs working in IHS can have a role in suicide prevention, just as they do in the prevention of unintentional injuries. Currently, EHOs are already collecting injury data, bringing partners together, and providing technical assistance to tribes. EHOs have a foundation in public health knowledge through education and experience. For example, most EHOs have experience in injury prevention coalition building and maintaining existing coalitions by assisting in the development of goals and objectives. EHOs work in one of the few disciplines in IHS where the focus is on the prevention of disease and injury rather than treatment. In many rural communities EHOs serve as one of the primary public health practitioners, acting as public health experts for the tribes they serve. Many EHOs have advanced training in injury prevention, including the IHS

Table 2. Suicide Prevention Strategies

<p>Universal Prevention Strategies: Reduce risk and enhance protective or mitigating factors</p>	<ul style="list-style-type: none"> • Restrict access to lethal means: <ul style="list-style-type: none"> - Safe firearm storage - Safe medication storage • Public health messages/media campaigns • School-based interventions • Gatekeeper interventions • Screening
<p>Selective Prevention Strategies: Address population specific characteristics that place individuals at a higher than average risk</p>	<ul style="list-style-type: none"> • Population-specific approaches • American Indian Life Skills Development Curriculum • Managing depression
<p>Indicated Prevention Strategies: Treat individuals with precursor signs and symptoms to prevent development of full-blown disorders</p>	<ul style="list-style-type: none"> • Emergency room screening and follow-up • Contact with high-risk individuals through letters or phone calls • Brief psychological intervention

*Adapted from the Handbook of Injury and Violence Prevention, Haas, 2007

Table 3. Potential Members of a Suicide Prevention Coalition

Administrative	Health-Related	Community Members
<ul style="list-style-type: none"> • Tribal Council members • Tribal administrators • Tribal Health Board members • Grant writers 	<ul style="list-style-type: none"> • Tribal/IHS mental health providers • IHS environmental health officers • Public health nurses • Clinic health directors • Community health representatives • Community health aides • Local and state agencies • Social workers • Tribal injury prevention practitioners 	<ul style="list-style-type: none"> • School staff • Suicide survivors (personal or family member) • Tribal spiritual leaders • Clergy • Interested community members • Youth workers/youth leaders

IP short courses and the IHS IP Fellowship. This advanced training, combined with experience working in tribal communities and education, make EHOs very qualified to expand their role in injury prevention to include suicide prevention.

The mission of the IHS IP Program is 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.³⁴ We know EHOs play a critical role in fulfilling this mission, and we are challenging EHOs to take up the charge issued by RADM John Babb at the 2008 Commissioned Officer Foundation Symposium: “If not now, then when; if not here, then where; if not you, then who?”

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