The Wyoming Department of Health
Public Health Division

REPORT ON SUICIDE IN WYOMING

Compiled by:

Thomas O. Forslund, Director
Wyoming Department of Health

Wendy E. Braund, MD, MPH, MSEd, FACPM,
State Health Officer and Senior Administrator
Public Health Division

Keith Hotle, JD, MPA
Prevention Unit Manager & Suicide Prevention Team Leader
Public Health Division

Wyoming Department of Health
(048)
Public Health Division
Website: http://health.wyo.gov/publichealth
Cheyenne, Wyoming 82002

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I. Executive Summary

Wyoming has a serious suicide problem – a tough reality confirmed by three decades of statistics that perennially place Wyoming among those states in the nation with the highest per-capita suicide rates. Indeed, Wyoming is one of the deadliest places in the world in terms of suicide, with only eight countries reporting higher rates of suicide. In numbers of lives lost, the burden of suicide largely falls on middle-age men, who account for nearly 40% of all suicide deaths. As a public health issue, however, suicide has much broader implications. It is the second leading cause of death for Wyoming youth, who have a suicide rate twice the national average. Fewer older residents die by suicide as compared to other age groups, but their death rate is more than double the overall state average. Given the state's racially homogenous composition, the vast numbers of residents who kill themselves are white; yet the Native American suicide rate is 25% higher than that of white Wyomingites. In short, suicide impacts persons of all ages and races in Wyoming and no group remains unaffected.

Unfortunately, there is no easy answer to the problem. The dynamic of suicide is hard to understand, and even more difficult to confront effectively: "While a universal phenomenon, the incidence of suicide varies so immensely across different population groups – among nations, cultures, ages and gender, race and religion – that an overarching theory about its root cause is rendered useless" (Anderson, 2008). Confounding the matter are factors specific to Wyoming and its western neighbors, which reinforce and exacerbate suicidal behaviors, particularly among men. Key among these are inadequate education and training for primary care providers and mental health professionals and easy access to firearms. Cultural norms that support a "cowboy up" mentality are a disincentive to help-seeking behavior. A sense of fatalism leads to the faulty conclusion that suicide is intractably entrenched in Wyoming's ethos and therefore impossible to stop. Stigma and bias associated with mental illness and suicide are also pervasive.

Notwithstanding the challenges, applied research offers potential solutions to Wyoming's high suicide rates. Multiple studies demonstrate the effectiveness of public health initiatives employed at the systems level, most notably those designed to reduce firearm access by high-risk individuals and to increase the capacity of primary care providers to assess and manage depression and suicide risk. The literature supports the efficacy of using evidence-based programs and best practices to reduce suicidal behaviors. Finally, research suggests Wyoming's suicide prevention efforts could be enhanced through effective messaging and outreach designed to raise awareness, reduce stigma and increase life-saving measures among Wyoming residents.

Based upon Wyoming's suicide data, scientific research, and the state's current prevention capacity, this report recommends a set of integrated measures to reduce suicidal behaviors among Wyoming residents across the lifespan.[1] These recommendations include major policy initiatives designed to create the systems-level change necessary to reduce the state's suicide death rates. Further recommended are evidence-based suicide prevention and early intervention strategies and best practices for state agencies and community partners to employ as part of an overarching suicide prevention initiative.

[1] This report is confined to administrative policy change. It does not address possible legislative action to reduce suicide in Wyoming or clinical treatment protocols. Additional study of legislative solutions and improvements to the state's mental health and substance abuse treatment system would be instructive and is highly encouraged.

II. Problem Statement[2]

Since 1980, Wyoming has recorded 3,164 suicide deaths. During the 29 years for which the CDC has been collecting national data, Wyoming recorded the second-highest per capita suicide rate among all states (19.3 per 100,000 persons). Other states with historically high suicide rates are those in the Rocky Mountain West and Alaska, all of which share cultural, geographical and demographic characteristics associated with heightened suicide risk. The following table depicts the relatively static nature of Wyoming's annual suicide death rates over the past decade:

Table 1. Wyoming Suicide Death Rates

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Number	106	109	88	84	116	97	119	111	130	127
Rate per 100,000	21.20	21.65	17.29	16.34	22.19	18.14	21.79	19.83	23.06	22.85
Source: Wyoming Department of Health, Vital Statistics Services (2012)										

To put this death toll in perspective, suicide was the 5th leading specific cause of death in Wyoming last year, with 127 recorded fatalities. As reflected in the following table, this accounted for roughly 3% of death from all causes and was greater than any other specific source of death by intentional or unintentional injury.

Table 2. Leading Causes of Death in Wyoming (2011)

Cause of Death	Rank	Number	Percentage of all deaths
Major Cardiovascular Disease	1	1173	27.1%
Malignant Neoplasms (i.e., cancer)	2	919	21.2%
Chronic Lower Respiratory Disease	3	319	7.4%
Alzheimer's Disease	4	153	3.5%
Suicide	5	127	2.9%
TOTAL		2691	62.1%
Source: Wyoming Department of Health, Vital Statistics Services (2012)			

Suicide was the 10th leading cause of death in the United States in 2009 and accounted for 1.5% of all deaths (Centers for Disease Control and Prevention, 2011), about half the level experienced in Wyoming (Table 2). While the relative impact of suicide at the national level is considerably less than in Wyoming, it nonetheless has been characterized as an "under-recognized public health crisis" and its prevention a "national imperative" (Insel, 2010; National Research Council and Institute of Medicine Report, 2003)

Comparing Wyoming's current suicide death rate to those of the 104 nations for which the World Health Organization has data, Wyoming falls just below Hungary (ranked 7th with a suicide rate of 24.6 persons per 100,000) and Japan (ranked 8th with a suicide rate of 24.4 persons per 100,000) (World Health Organization, 2012) in terms of highest suicide rates in the world. Thus, if Wyoming was a country, it would rank among the world's top ten deadliest nations with respect to suicide among its residents.

[2] Unless otherwise stated, these statistical data were obtained through the WISQARS Fatal Injury Reports system, Centers for Disease Control and Prevention, www.cdc.gov/injury/wisqars/fatal_injury_reports.html and from the Wyoming Department of Health, Vital Statistics Services.

A. Suicide and Gender

It has been observed that: "Death by suicide is a strikingly male phenomenon" (Kaplan, 2011). Nowhere is this more apt than in Wyoming. During the 1999-2009 time period, there were 1108 suicides in Wyoming; of these, 899 (81%) were males and 209 (19%) were females. Characteristic of male suicides is the use of firearms. Of Wyoming suicide deaths occurring between 1999 and 2009, males completed suicide with a firearm in 71.7% of reported cases, as compared with 46.9% of completed female suicides.

Suicide risk factors for men include alcohol dependency and heavy drinking, marital status, employment and income stressors, retirement, physical illness/disability, mental health issues and military veteran status (Kaplan, 2011). Suicidal behaviors have drastically increased for male active-duty military personnel and veterans over the preceding decade (Hyman, 2012), a problem receiving considerable attention and resources from the various military branches. Unemployment has been shown to increase risk of suicide in males by as much as 300% (Kaplan, 2011). Wyoming's unemployment rates have not increased as much as many other states during the recent national recession; for example, data from the Wyoming Department of Workforce Services indicate a 5.6% jobless rate in the state for July 2012 (8th lowest in the country), which was well below the 8.3% national unemployment rate. According to the 2010 Wyoming Behavioral Risk Factor Surveillance System (BRFSS), Wyoming adults report they are experiencing many other risk factors associated with elevated suicide risk:

Table 3. Wyoming Adult Behavioral Risk Factors

Category	2006	2007	2008	2009	2010
Mental health, which includes stress, depression, and problems with emotions, was not good for 14 or more of the past 30 days	9.3%	9.0%	8.8%	9.4%	9.7%
Rarely or never get the social or emotional support they need	6.0%	5.8%	5.6%	6.5%	5.5%
Dissatisfied or very dissatisfied with their lives	3.2%	3.7%	3.4%	4.3%	4.5%
Binge drinking at least once in past month	14.7%	15.3%	13.8%	13.8%	13.2%
Heavy drinking (60+ drinks for men; 30+ drinks for women) in past thirty days	5.6%	4.9%	5.6%	5.7%	4.8%
Extreme drinking (more than 10 drinks on one occasion in past thirty days	4.1%	4.5%	4.5%	3.9%	3.6%
Driving after perhaps having too much alcohol at least once in past thirty days	3.1%	2.8%	2.6%	2.3%	2.2%
Smoked at least 100 cigarettes in lifetime and currently smoking every day or some days	21.6%	22.1%	19.4%	19.9%	19.5%
Physical health, which includes physical illness and injury, was not good for 14 or more days during the past 30 days	9.4%	9.6%	9.7%	9.4%	10.4%
Disability - adults limited in any way in any activities because of physical, mental, or emotional problems or they have a health problem that requires the use of special equipment such as a cane, wheelchair, special bed, or special telephone	21.4%	20.0%	22.1%	20.4%	22.8%
No health care coverage, which includes health insurance prepaid plans such as HMOs or government plans such as Medicare.	17.9%	15.9%	15.6%	16.4%	16.5%
Unable to see a doctor for needed care because of the cost at least once in the past 12 months	13.3%	12.3%	11.8%	12.4%	11.5%

Source: Wyoming Department of Health, Behavioral Risk Factor Surveillance System, http://www.health.wyo.gov/phsd/brfss/index.html, retrieved August 20, 2012

B. Age and Racial Considerations

Wyoming residents between the ages of 40-50 years are among the highest of all age groups in terms of both numbers of deaths (20% of all completed suicides) and suicide rates (approximately 29 persons per 100,000, or about three times the national average for all persons). A substantial majority (74%) of Wyoming's suicide deaths over the past decade were among white males, with roughly 30% of all suicide deaths occurring among white "middle age" men between the ages of 35-54. A breakdown of Wyoming suicide deaths and death rates by all age groups over the last decade is attached as Appendix I.

Older adults in Wyoming have lower numbers of suicide deaths as compared to youth and middle-aged residents, but their rates over the past decade have been consistently highest among all age groups. Over the last ten years, adults age 80-84 recorded the highest suicide rate of all age groups (45.68 per 100,000 persons), which was more than twice the state average (20.43 per 100,000 persons). Persons over age 85 had the second highest suicide rate in the state at 37.3 deaths per 100,000 persons. These high rates may be attributable in part to the fact that 68% of older adults know little or nothing about depression and 58% of persons aged 65 or older believe depression is a "normal" part of aging (Centers for Disease Control and Prevention and National Association of Chronic Disease Directors, 2009). In light of these facts, it is unsurprising that only 3% of older adults receive any sort of treatment by mental health professionals (Id.)

Although persons under age 20 account for only 7% of all Wyoming suicides, suicide is the second leading cause of death for Wyoming youth, behind fatal car crashes. When compared to other states, Wyoming's youth suicide rate is particularly problematic – the 5th highest in the country over the most recent decade for which nationally comparable data is available. During the same time period, Wyoming's death rate for youth under age 20 (5.14 per 100,000 persons) was more than twice the national average (2.24 per 100,000 persons). The burden of suicide on Wyoming youth is further reflected by high rates of suicidal thoughts and non-fatal suicide behaviors among high school students:

Table 4. Wyoming Youth Suicidal Ideation and Behavior

Category	**2005**	**2007**	**2009**	**2011**
Middle School Students Who Ever Seriously Considered Suicide	22.4%	23.2%	21.2%	21.9%
Middle School Students Who Ever Made Suicide Plan	15.8%	16.5%	14.2%	14.7%
Middle School Student Who Ever Attempted Suicide	8.4%	9.3%	7.9%	6.5%
High School Students Who Considered Suicide Last Year	17.4%	17.8%	17.3%	17.4%
High School Students Who Made a Suicide Plan in Last Year	15.7%	17.8%	15.3%	14.2%
High School Students Who Attempted Suicide in Last Year	8.7%	10.5%	9.4%	11.3%
High School Students With Serious Suicide Attempt Last Year	2.7%	4.2%	4.0%	4.9%
High School Students With Depression/Hopelessness	26.3%	28.2%	26.9%	25.5%
Source: Wyoming Department of Education, Youth Risk Behavior Study (2012)				

Despite some annual variation among categories, suicidal thoughts and behaviors among middle school students and high school students have remained relatively constant over the six-year period reported. In addition to overt suicidality, Wyoming youth data reflect the presence of multiple risk factors associated with youth suicidality, including high rates of underage drinking and other substance abuse problems, family discord and dysfunction, sexual abuse, access to

guns, school safety issues, and antisocial behaviors. Data on protective factors – i.e., those characteristics associated with diminished suicidality – reflect that many youth lack adequate resiliency and support (YRBS 2012; PNA 2011). For example, more than one-third of high school seniors lack appropriate coping skills, religiosity or belief in a moral order (Id.), all of which can protect against suicidal behaviors. While the presence or absence of any single risk or protective factor is not predictive of suicide, these data are alarming. A more complete snapshot of selected risk factors among Wyoming 12th graders is provided in Appendix II.

A comprehensive national study of college students indicated that 55% of undergraduates and half of graduate students had prior suicidal ideation, with 18% and 15%, respectively, having seriously considered suicide (Jayson, 2008). Alcohol-related problems experienced by college students (and the perceived burdensomeness and thwarted sense of belonging that such problems typically engender) may have a particularly strong relationship to suicide risk among this population (Lamis, 2011). Wyoming's high suicide numbers and rates for college-aged residents (ages 20-24) suggest that this group may be particularly vulnerable to suicidal behaviors.

As might be expected given the state's racial composition, the overwhelming majority of suicides occurring over the past decade (94%) have been completed by white residents. Native Americans accounted for 3.3% of suicides in Wyoming during the decade, but their average per capita suicide rate (24.55 per 100,000 persons) was 25% higher than that of white residents. Also a concern for this population are suicide clusters, such as the one that struck Wind River in fall 1985, leaving ten Native American males ages 14-25 dead from suicide by hanging.

C. Regional Explanations for Wyoming's High Suicide Rates

It has long been an observed phenomenon that high suicide rates in the United States are centered in certain areas of the country. Speculative theories and anecdotal explanations have been around for years, but without much supporting data. A recent study sought to scientifically analyze seven "high-suicide" states located primarily in the Rocky Mountain West (including Wyoming) and compare them to five historically "low suicide" states, in an to attempt to determine common characteristics of suicide among these geographic regions. These researchers concluded that there were two primary components that explained the high levels of suicide in Wyoming and other western states over time: (1) firearm access; and (2) "regional context" (Shrira, 2010). Data would seem to confirm the validity of the first conclusion, since Wyoming leads the nation in the rate of suicide deaths by firearm over the last decade (13.32 per 100,000 persons), which is more than double the national firearm suicide rate and roughly 400% higher than the average rate in the northeast region of the United States, in which firearm access is more restrictive.

With respect to "regional context" the research indicates that the common characteristic among states of the high-suicide region is low population density, which in turn contributes to an increase in environmental suicide risk factors such as social isolation and lack of access to mental health care services (Shrira, 2010). Another consideration is that many residents of rural areas espouse a strong Protestant work ethic, which may increase the likelihood of suicide when job loss or health problems prevent them from working (Shrira, 2010). Given the cultural value placed on self-reliance and personal independence in this high-suicide region, the loss of that independence – for example through unemployment, old age, or chronic illness – can be devastating, particularly for men.

There has been some debate as to whether high altitude affects suicide rates. Authors of an article published last year concluded that suicide "victims at high altitude differed significantly from those at low altitude with respect to multiple demographic, mental health, and suicide-related characteristics, including race, Hispanic ethnicity, intoxication, report of a depressed mood preceding the suicide, firearm use, and a recent financial, job, legal, or interpersonal problem" (Betz M. E., 2011). In other words, high-altitude regions share a number of related characteristics that independent of altitude may lead to increased suicidality. This contradicts earlier research suggesting a more direct correlation between altitude and suicide risk.

D. Suicide Prevention Data Surveillance and Reporting

Sound public health prevention depends upon data for both strategic planning and program evaluation: "The first step in preventing [a public health problem] is to understand the *who, what, when, where* and *how* associated with it. Grasping the magnitude of the problem involves analyzing data…" (Centers for Disease Control and Prevention, 2012). In Wyoming, aggregate data on suicide deaths is available from the Wyoming Department of Health, Vital Statistics Services. These data include basic demographic information such as place, time and manner of death, marital and education status, and race. Additional information on suicide deaths is not routinely collected, but may be obtainable in piecemeal fashion by contacting individual county coroners, law enforcement agencies and funeral directors. Complete aggregate data on suicide attempts is not readily accessible; however, some limited data is collected by Wyoming hospitals and housed on databases to which access is restricted or limited by privacy regulations. As reflected by the reliance in this report on data from multiple sources outside Wyoming, extensive gaps exist in this state in terms of suicide death and attempt data surveillance and reporting, which in turn impact the effectiveness of strategic planning and resource allocation. Improved surveillance and reporting by Wyoming coroners and hospitals would help close these data gaps.

- ***Recommendation: The Wyoming Hospital Association should facilitate the development of processes, protocols and reporting forms to collect and report suicide attempt data and coordinate with the Wyoming Department of Health with respect to the utilization and sharing of such data for planning purposes in compliance with the Health Insurance Portability and Accountability Act (HIPAA) and other applicable state and federal laws and regulations.***
- ***Recommendation: The Board of Coroners Standards should develop and implement uniform standards for the investigation of cases of apparent or suspected suicide and for collecting and reporting of suicide death data.***

The "psychological autopsy" is a process of collecting and analyzing qualitative data relating to suicide risk and protective factors, mental health and substance abuse issues, adverse life events, familial support and other circumstances directly relevant to better understanding the nature of suicide in individual death cases. It was developed in 1960 by Dr. Edwin Shneidman, prominent suicide researcher and founder of the American Association of Suicidology (AAS), in collaboration with Robert Littman, MD, and Norman Farborow, PhD. In the ensuing fifty years, the psychological autopsy has become a best practice postmortem procedure to reconstruct the proximate and distal causes of an individual's death by suicide or to ascertain the most likely manner of death where that manner of death is equivocal and left undetermined by a medical examiner or coroner. The psychological autopsy is used in case-control research studies to better

ascertain risk factors for suicide, and helps to answer questions of causation in both individual cases of suicide and interconnections between cases, as in clusters of suicides. Where applied across most or all suicides within a closed system (such as the State of Wyoming), the psychological autopsy may be the best method in the field to examine multiple factors affecting suicidal behaviors to inform prevention efforts. There are two Certified Psychological Autopsy Investigators in Wyoming, both of whom have completed the AAS Psychological Autopsy Certification Training Program.

- ***<u>Recommendation</u>: The Wyoming Department of Health should pilot test a countywide psychological autopsy project beginning January 1, 2013 and ending December 31, 2013, and prepare a final report describing the results of that project to determine the efficacy of expanding it in other counties.***

III. Wyoming Suicide Prevention Program; State Infrastructure and Capacity

The landscape of suicide prevention has changed much over the last two decades. Historically, suicide generally was considered a "problem" relegated to the mental health treatment system to deal with. Beginning in the latter part of the twentieth century, there was a mounting interest across the United States in addressing suicide as an important public health issue. In Wyoming, a group of interested stakeholders from around the state came together in the late 1990s to form the Wyoming Suicide Prevention Task Force (Task Force). Aligned with what was then known as the Mental Health Division of the Wyoming Department of Health (WDH), the Task Force conducted gatekeeper trainings, convened suicide prevention meetings and conferences, and fostered burgeoning coalitions in some Wyoming counties.

Informal suicide prevention efforts continued in the state until 2005, when the Wyoming State Legislature created a dedicated suicide prevention program within the WDH. Found at Section 9-2-102 of the Wyoming Statutes, it reads:

> Department of health; duties and responsibilities; state grants.
>
> (a) The department of health is the state mental health authority, the developmental disabilities authority and the substance abuse authority. The department through its divisions has the following duties and responsibilities to:
>
> ***
>
> (v) Establish a statewide suicide prevention program that includes:
>
> (A) A statewide written plan adopted by the department following at least one (1) statewide public meeting of interested persons and entities;
>
> (B) Assistance to local communities in the development and maintenance of suicide prevention coalitions;
>
> (C) Consultation, technical assistance and training to state and local agencies, organizations and professional groups;
>
> (D) Maintenance of a library of suicide prevention materials and information which shall include copies of or links to Cochrane collaboration systematic reviews or other similar sources relevant to this subject;

(E) Collection and dissemination of information regarding best practices for suicide prevention and intervention.

Early efforts of the Wyoming suicide prevention program focused chiefly on raising awareness about the problem of suicide in Wyoming. This was done through various public outreach efforts and by providing annual community-based grants of no more than $10,000 per county for local suicide prevention coalitions. Given budgetary constraints, funding was not available at that time to hire suicide prevention staff to support the efforts of these all-volunteer coalitions.

Beginning in 2006, the state received two successive rounds of competitive funding for youth suicide prevention from the Substance Abuse and Mental Health Services Administration (SAMHSA). The first of these three-year grants provided $400,000 per year and ended in September 2009; the second provided $500,000 per year and is scheduled to expire in September 2012, with no additional federal funding forthcoming. Because of the proportionately greater funding available for youth suicide prevention and early intervention, this population has been the focus of much of the state's suicide prevention efforts since 2006.

As required by statute, the Suicide Prevention Team Leader (Team Leader) within the Wyoming Department of Health provides expert technical assistance on suicide prevention, including participating in radio, newspaper and television interviews; distributing brochures and other information relating to recognition of suicide warning signs; conducting suicide prevention and intervention skills trainings; maintaining a suicide prevention webpage on the Department of Health website; and promoting the responsible reporting of suicide deaths by the media. Since 2006, the Team Leader has administered and monitored the federal youth suicide prevention grant and otherwise served as the touchstone for statewide suicide prevention efforts in Wyoming. Throughout this time, the Team Leader has facilitated a dynamic cross-collaboration and information sharing among state level stakeholders and community-based suicide prevention efforts, including facilitating regular meetings and periodic strategic planning workshops of the Wyoming Suicide Prevention Advisory Council (WySPAC), formerly the State Suicide Prevention Task Force. Since the inception of the state program, the Team Leader has maintained and updated the State of Wyoming Suicide Prevention Plan. The State Plan and its priority objectives developed as a result of the most recent strategic planning efforts in 2010 are attached as Appendix VII.

Suicide prevention efforts implemented over the past seven years under the state and federal programs have been substantial. The Wyoming Department of Health has created a website for youth, which currently is hosted at www.JustLetItOut.org, and has developed a groundbreaking series of webinars and newsletters for public schools and other youth prevention stakeholders as part of its "Well Aware™" initiative. Hundreds of Wyoming residents have been trained using evidence-based suicide risk assessment and intervention models such as Applied Suicide Intervention Skills Training (ASIST); Question, Persuade, Refer (QPR); and SafeTALK; additionally, six Assessing and Managing Suicide Risk (AMSR) workshops for clinicians have been held across the state. In 2009, the Department of Health began funding the Brief Intensive Treatment for Suicidal Individuals and Their Support Systems (BIT-SITSS) pilot project in Park County, which constitutes a major new treatment practice designed to help suicidal individuals in the least-restrictive community setting possible, thereby avoiding institutional placement and increased risk of suicide re-attempts. Initial data from BIT-SITSS have been very promising and show reduced depression and relapse among clients successfully completing the program.

Multiple awareness raising events have been supported throughout Wyoming, including the Walk of Grace (Cheyenne), Garrett's Palms Suicide Awareness Walk (Pinedale), Living Art Project (Rock Springs), Breaking the Silence Walk (Casper), Adrien Hernandez Memorial Skateboard Tourney (Casper) and Out of the Darkness Walk (Sheridan). Collaborations with the Departments of Workforce Services and Education have resulted in education, outreach and programs across the state. Other efforts include establishing peer-based suicide prevention groups, support groups for suicide survivors, and gunlock distribution. Wyoming recently received approval from the American Foundation for Suicide Prevention (AFSP) to form the first-ever AFSP chapter in the state. Additionally, the Department currently is collaborating with Wyoming-based company Taco John's to raise awareness through its network of local restaurants. This partnership will educate patrons about the problem of suicide and encourage help-seeking behaviors by those at risk or their loved ones. Taco John's has agreed to donate a percentage of proceeds generated through this effort to local suicide prevention organizations.

Current suicide prevention efforts in Wyoming reflect an overall philosophical shift across the country concerning the most effective model for prevention. Whereas "prevention" used to consist primarily of manning booths at health fairs, hanging posters in high schools, and providing individualized programs for selected groups of at-risk individuals, it now focuses on community-level (environmental) change. Prevailing prevention best practices seek to reduce dangerous and undesirable behaviors through the development of protocols and policies, and to reduce stigma by changing community norms around the issues of suicidality and mental health. Wyoming's substance abuse and suicide prevention practices are modeled after this public health approach to prevention, which emphasizes data-driven decision making for strategic planning and program implementation, reliance on evidence-based programs and practices, and continuous evaluation.

In July 2010, the Wyoming Department of Health (WDH) integrated suicide prevention into its Core Prevention Initiative for community-based prevention services, which included all substance abuse prevention efforts other than tobacco prevention and control. This first step towards the integration of substance abuse prevention and mental health promotion anticipated a larger national effort that now encourages such integration across state systems. As part of the Core Prevention Initiative, some funding for suicide prevention was included in the prevention portfolio provided to communities, but that funding was not sufficient to support the hiring of local staff for suicide prevention. This integration process began to engage community prevention program managers in incorporating suicide as a priority problem to consider as part of their larger strategic planning.

Funding for all WDH community-based substance abuse and suicide prevention efforts currently is provided to the recently formed Wyoming Prevention Management Organization, which is responsible for coordinating and administering local prevention dollars across Wyoming. A substantial allocation has been made during the present state biennium by the Wyoming Department of Health for suicide prevention efforts, including funding sufficient to hire four full-time suicide prevention regional coordinators to work directly with communities. A percentage of prevention funding also has been provided to maintain important programs and initiatives developed over the course of the federal youth suicide prevention initiative, such as the youth website and the Well Aware™ initiative.

The four recently hired suicide prevention coordinators are in the process of undertaking comprehensive needs assessments in their respective regions, including collecting data on local suicide rates, risk and protective factors, and community readiness. When complete, this needs assessment, combined with the research and recommendations set forth in this report, will inform strategic planning to be completed later this year. The end result of this process will be the completion of a coordinated statewide suicide prevention initiative with specific state, regional and local benchmarks. At that time, the Wyoming Suicide Prevention Advisory Council (WySPAC) and the State Suicide Prevention Team Leader will work with the regional coordinators and other stakeholders to update the State Suicide Prevention Plan.

- ***<u>Recommendation</u>: The State Suicide Prevention Program, including the Suicide Prevention Team Leader, Regional Suicide Prevention Coordinators, and the Wyoming Suicide Prevention Advisory Council, should update the State Suicide Prevention Plan and create regional strategic plans for suicide prevention no later than January 1, 2013, in a manner consistent with the recommendations set forth in this report.***

IV. A Public Health Approach to Suicide Prevention

Although suicide is considered to be a preventable outcome in most individual cases, no single program is likely to produce sustainable large-scale reductions in suicide rates (Center for Substance Abuse Treatment, 2008). Rather, because suicide is the product of multiple causes, its prevention requires a broad public health approach with multifaceted strategies (Id.). The goal of the public health model, in general, has been characterized as fundamentally changing the approach to health and illness from a disease care system to a health care system that stresses prevention on a level par with diagnosis and treatment (Id.). The public health approach employs the following steps: (1) defining the problem; (2) identifying causal areas and/or risk and protective factors; (3) developing and evaluating interventions; and (4) widely disseminating and implementing effective interventions in a variety of communities (Vajani, 2007). Sound evaluation is central to the public health approach and is continuous.

A public health approach recognizes the need to address suicide systematically, rather than merely as individual, unrelated cases. So many factors are at work that predicting individual acts of suicide is difficult. Even acknowledging the ubiquitous role that mental illness plays only goes so far, as only a fraction of those with a diagnosed mental illness die from suicide. Some who suffer from depression battle suicidal thoughts over many years, and succumb only reluctantly. For others, suicide is a spontaneous act born of impulse and lowered inhibitions due to alcohol or drugs, which becomes deadly when combined with ready access to lethal means. Research indicates that widely implemented population-based strategies may have a greater impact in reducing suicide rates than traditional programmatic approaches that concentrate on individuals (Vajani, 2007). In the field of suicide prevention, the two population-based public health interventions with the greatest promise for reducing suicide rates are (1) restricting access to highly lethal means of suicide; and (2) educating medical providers concerning suicide intervention skills (Id.). Both interventions receive considerable treatment in this report.

Another recognized public health approach to suicide prevention is through brief, focused suicide prevention trainings to diverse members of the community (Cross, 2007). Designated as "gatekeeper" trainings, they may be provided to those who are likely to be in a position to detect

suicidality in individuals with whom they may come in contact and implement simple life-saving protocols. These gatekeepers include teachers, clergy, first responders and law enforcement officers, coworkers, social services providers, and other stakeholders. The theory behind gatekeeper effectiveness is simple: increasing the number of community members who are trained to recognize suicide risk and refer at-risk individuals to help will result in greater opportunities for life-saving interventions and treatment (Id.). This directly translates into lives saved, and over time can drive down suicide attempts and deaths across the state.

Gatekeeper trainings also serve the important purpose of elevating the conversation around suicide and decreasing stigma associated with mental health issues and suicide (Bean, 2011). Further, such programs have been shown to increase participant confidence in being able to successfully intervene with suicidal persons (Id.). One study concluded that gatekeepers maintained their improved competencies for at least six months after training (Chagnon, 2007) Gatekeeper training in the workplace appears to have demonstrable benefits and should be one component in a larger public health suicide prevention effort (Cross, 2007). Broad gatekeeper trainings and support throughout the aging system have also been suggested as one strategy in preventing suicide among older adults (Conwell, 2001). It has been noted that faith-based organizations play an important role in systems of behavioral health, both as partners in prevention and in developing service pathways within communities (DeKraai, 2011). This may be particularly true in the field of suicide prevention, since clergy often are primary counselors for persons in crisis and thus are considered key gatekeepers in a comprehensive prevention approach (Dervic, 2004).

- ***<u>Recommendation</u>: The Wyoming Department of Health, in collaboration with other Executive Branch agencies, boards and commission, should develop a comprehensive plan for providing "gatekeeper" suicide risk alertness trainings to members of public, private-sector and faith-based organizations across Wyoming with a goal of training one-tenth of the population by 2015.***

Robust suicide prevention efforts (e.g., universal approaches that combined lethal means restriction with improved clinical care) in Europe have seen national decreases in suicide rates ranging from 20% to more than 60% (Caine, 2012). Closer to home, the United State Air Force (USAF) suicide prevention program employed a multi-layered, top-down public health approach to suicide prevention that decreased suicide rates throughout that military system – notably, without adopting policies restricting access to firearms. This program reduced suicide at a systems level by changing the cultural norms around suicide; to wit: the USAF fundamentally shifted its approach to suicide from solely a medical or mental health problem to a community-wide problem (Knox, 2010). It accomplished this through programs designed to reduce stigma around mental illness and suicide and by encouraging early help-seeking behavior (Id.). The USAF suicide prevention program succeeded in reducing the suicide rate by 33%, but also reduced the amount of severe family violence, homicides and even accidents by equally wide margins. By "reverse engineering" the Air Force program, from the results back to the strategy, it is hard to deny the connection between different types of social pathology and the real possibility of affecting several conditions (violence, abuse, homicide), even when ostensibly targeting just one (suicide). The success of the USAF program indicates that improving overall community mental health through a public health prevention approach can reduce suicide more effectively than even extensive efforts to identify the imminently suicidal individual.

Although science-based suicide prevention is more recent than other major public health prevention efforts such as tobacco use and underage drinking, the field is sufficiently mature to have produced 22 suicide prevention, early intervention and treatment programs and practices that have been scientifically tested with sufficient rigor to permit inclusion on the National Registry of Evidence-Based Programs and Practices (NREPP). A list of these NREPP programs is attached as Appendix III to this report. In addition, the Suicide Prevention Research Center (SPRC) maintains a database of more than 50 best practices with demonstrated effectiveness in reducing risk factors and increasing protective factors associated with suicide. A listing of these best practices is provided in Appendix IV. The strategic use of these evidence-based programs and best practices as part of a comprehensive public health approach to suicide prevention provides the greatest chance for achieving long-term positive outcomes, including reductions in suicidal behaviors across populations.

- ***<u>Recommendation</u>: Suicide prevention efforts in Wyoming communities should utilize scientifically validated evidence-based programs and best practices as part of a comprehensive public health approach to reducing suicidal behaviors.***

V. History, Nature and Causes of Suicidality

Anyone who has ever suffered the loss of a loved one or friend to suicide has struggled with the question of why that individual took his or her own life. Mental health providers and doctors with suicidal patients have searched for similar answers: "Suicide is a behavioral outcome reached through so many different pathways that no constant set of clinical features can act as an accurate predictor" (Klott, 2007). The complex nature of suicide warrants a brief examination of its history and the major explanatory theories developed over the last century.

The Institute of Medicine's seminal treatment on the subject, *Reducing Suicide: A National Imperative*, states: "Suicide is not a new phenomenon. Strikingly, accounts of suicide across the last millennium catalog the same factors associated with suicide as those revealed by modern scientific study in western cultures: serious mental illness, alcohol and substance abuse, co-morbidity, childhood abuse, loss of a loved one, fear of humiliation, and economic dislocation and insecurity" (Institute of Medicine, 2002). In some traditions, suicide historically was deemed a permissible act based on prevailing cultural norms; for example, Chinese and other Oriental societies viewed suicide as a viable option for coping with humiliation or protesting against social corruption (Id.). In western, Judeo-Christian culture, prohibition against suicide began with early church leaders as a reaction to high suicide rates associated with martyrdom; this was reinforced by Roman laws banning suicide, which were designed to counteract waning population rates caused by famine, plagues and war (Id.). Serious social and religious objections to suicide continue to this day, and are pervasive in modern American culture.

Emile Durkheim's 1897 book, *Suicide: A Study in Sociology* marked a major turning point in societal attitudes regarding suicide (Hassan, 1998). Durkheim described suicide as a social problem that could be explained in scientific terms. In Durkheim's view, individual suicides were linked to the moral state of society. He believed suicide rates increased during periods when individual connections to society broke down, leading to widespread feelings of hopelessness. This notion was revolutionary because it rejected the previously held notion that suicide was purely a personal act of social depravity. Instead, according to Durkheim, society was responsible for the conditions that led to fractured social integration of its individuals.

Durkheim's suicide theory, despite being more than one hundred years old, is still cited in modern discussions of suicidality, and while no longer embraced in its entirety, the explanatory value of his concept of social integration is still relied upon by scholars today (Joiner, 2005).

A more contemporary but just as prominent suicide theorist, Dr. Edwin Shneidman began advancing his insights beginning in the 1960s. At the heart of his theory is the role of emotional pain in suicides. Shneidman said, "The author of suicide is pain," (Shneidman, 1998). Despair, loneliness, fear, anxiety, guilt, shame, depression, mental disorders, alcoholism, or losing a spouse are all examples of conditions that can lead to the severe pain he calls "psychache." In Shneidman's view suicides and suicidal acts are efforts to stop or end that pain. The source of this pain, he claims, is thwarted or distorted psychological need.

Considered the father of cognitive therapy, Dr. Aaron Beck, pioneered numerous instruments that are still widely used to assess a patient's risk of suicide (Kovacks, 1975). Beck found the psychological instruments commonly employed by mental health professionals in the late twentieth century (such as the MMPI, Rorschach, and TAT) were inadequate for assessing suicide risk. To better measure suicide intent he developed the Scale for Suicidal Ideation, an instrument to measure the seriousness of suicidal intent. Employing his ideation scale, Beck and his colleagues found strong correlations between ideation and both depression and hopelessness (Beck, 1979). A few years later, when analyzing the results of a ten-year prospective study, Beck and collaborators found scores on a hopelessness scale he developed to be powerful predictor of eventual suicide; indeed, hopelessness proved to be an even stronger predictor of eventual suicide than the presence of depression or high ideation scores (Id.).

Recently, Dr. Thomas Joiner has contributed a theory of suicide that relies upon many aspects of previous theories while advancing a new component not considered by other theorists (Joiner, 2005). His interpersonal-psychological theory states that three components need to be present for someone to take his or her life. The first is a feeling of burden to family, friends and others. The second component is a thwarted sense of belonging. The final, and critical, component is the acquired capacity to act on suicidal urges. Specifically, perceived burdensomeness comes from an individual's sense of not making contributions to those around them and of being a burden. In the most realized state, these individuals come to believe they have become such a liability that others in their life would be better off if they were no longer alive. Joiner believes the need to belong also plays a powerful role in decisions to take one's own life. He references cases where his patients, although suffering, say they will not take their lives because of bonds to loved ones who depend upon them, need them, and want them to live. Joiner describes how depression may play a role in this second component. Individuals suffering from depression may struggle with human connections due to their illness, which in turn reinforces their sense of isolation and disconnectedness. The final element – required capacity for suicide – is critical according to Joiner. As humans we have a strong sense of self preservation. The impulse to hold on to life is strong enough that even if an individual has acute feelings of burdensomeness and is socially isolated, that person is not likely to take his or her life because of this compelling urge to hold on to it. It is only through habituation to pain and suffering or through a reduced fear of death that this final variable in the suicide equation can lead to a suicide. Arriving at the threshold of suicide through habituation or desensitization can come through a history of risk-taking or self-destructive behaviors, but the most important indicator of breaking down of this barrier is one or more previous suicide attempts.

The theories regarding suicide intention and action presented here contain common elements and do not need to be seen as competing explanations. Mental health professionals have come to embrace Durkhiem's views about society's role in individual suicides and to accept suicide as a public health issue as well as an individual issue (Hassan, 1998). Similarly, Durkheim's ideas about social integration are present in other explanations of suicide (Joiner, 2005). Shneidman's notion of psychache is a broad enough concept to fit within other theoretical structures. A large-scale study found psychache as an identified variable was a stronger predictor of suicidality than depression or hopelessness (Troister, 2010). Joiner examines this concept as well, linking psychache to burdensomeness and lack of social connections (Joiner, 2005). Beck's theories regarding emphasis on the role of hopelessness in suicide are likewise not incompatible with other theories. A feeling of hopelessness can result from numerous psychological variables such as the lack of social integration as suggested by Durkheim, Joiner's concepts of burdensomeness and failed social connection, or Shneidman's psychache. The theories of Durkheim, Shneidman, Joiner and others are important for more than their academic value. They provide an analytical framework for much of the field of suicide prevention in general, and collectively serve as the underpinnings for defining and understanding the various risk and protective factors upon which much prevention is founded.

VI. Risk and Protective Factors Associated with Suicide

Statistical data describe the scope of the suicide problem and theory helps explain the nature and causes of suicide; however, risk and protective factors define critical elements of the problem in a way that permits the development of effective prevention strategies. Although risk factors for suicide vary for each individual and among age groups and other subpopulations, they may be segregated into the following general categories: (1) bio-psychosocial (e.g., mental illness or substance abuse disorder, hopelessness, impulsivity, major physical illness or disability, prior suicide attempt, family history of suicide); (2) environmental (e.g., job loss, interpersonal conflict, relationship issues, easy access to firearms or other highly lethal means); and (3) social-cultural (e.g., isolation and lack of support, barriers to mental health care, exposure to suicide influences such as media that may cause suicide contagion) (Center for Substance Abuse Treatment, 2008). Major risk factors for suicide include the following:

- Stigma
- Prior suicide attempt
- Mental health and substance abuse disorders
- Lack of access to proper care
- Access to lethal means
- Significant distressing life events
- Victimization and childhood trauma
- Lack of connectedness to individuals, family, community, and social institutions

Protective factors include resiliency and problem-solving skills, accessible and effective care, strong family and community support, restricted access to lethal means, and cultural/religious beliefs that discourage suicide (Center for Substance Abuse Treatment, 2008). Because of the

complex and unique set of issues and circumstances that makeup each individual act of suicidality, no single risk or protective factor can be said to directly "cause" or "prevent" suicide. Rather, it is more appropriate to say that they are associated with greater or lesser suicide risk. In the aggregate, strategies designed to promote protective factors and reduce risk factors will in varying degrees impact suicidality across populations. Accordingly, a more thorough examination of these factors is instructive in designing a coordinated approach to suicide prevention and early intervention.

A. Stigma

One of the greatest challenges to suicide prevention is overcoming stigma – the host of misperceptions, biases and harmful cultural norms associated with suicide. While it is impossible to gauge the full extent of stigma in Wyoming, recent studies confirm that it is widespread. In 2008, the Wyoming Department of Health commissioned the University of Wyoming, Wyoming Survey & Analysis Center (WYSAC) to administer a statewide survey to collect data to inform suicide prevention strategic planning. A list of survey questions and responses are set forth in Appendix VI. Beliefs and perceptions of Wyoming's residents about suicide include:

- Dying is probably the best solution for suicidal individuals (10%)
- Reducing access to guns does not reduce the risk of suicide (77%)
- Receiving treatment for suicidal thoughts and behaviors carries social stigma (66%)
- Most people who talk about or threaten suicide don't do it (41%)
- If someone has experienced the suicide of a family member or a friend, this does not increases the risk that THEY will attempt suicide (37%)
- People who really want to die will find a way – it won't help to try and stop them (27%)
- One should not talk to depressed people about suicide; it might give them the idea or plant the seed (14%)

(WYSAC, 2008). As reflected in the survey responses, there are serious misconceptions in this state concerning suicide and suicide prevention, including the value of means restriction efforts, the efficacy of intervention efforts, and the perceived danger of addressing suicide with those at risk. The results further indicate disquieting levels of bias towards those who are suicidal or mentally ill. In addition, the survey revealed that 30% of respondents had no knowledge of how to talk to someone they believed to be at risk for suicide and 49% had no knowledge of crisis hotline numbers. These answers strongly suggest that considerable outreach and education remains to be done in Wyoming.

In March 2011, the Wyoming Survey and Analysis Center was commissioned to review the result of two similar surveys conducted in Park and Sheridan counties as part of the federal youth suicide prevention initiative (WYSAC, 2011). Like the 2005 statewide stigma survey, these local surveys asked local participants a number of questions about mental illness and suicide in their communities. The results are enlightening and largely confirm the results obtained from the statewide survey conducted three years earlier.

A high percentage of Park County residents (85%) claim to have been exposed to some manner of suicide prevention messaging (WYSAC, 2011). Relatively high percentages also agreed that suicide was a problem in their counties (Park-53%; Sheridan-67%), a fact that may be attributable in part to suicide prevention activities occurring in those communities. Despite general awareness of the problem, serious gaps persist. For example, few survey respondents in both Park County (13%) and Sheridan County (16%) have directly participated in activities in their community that dealt with the subject of suicide (such as seminars, workshops or orientation programs). Also troubling is the fact that more than a quarter of residents of both counties are unaware of any resource to which they could refer a friend with mental illness or at risk for suicide.

Like the state survey, the county surveys illustrate the presence of significant misperceptions about suicide. For example, almost a third of survey respondents in both Park and Sheridan counties agreed with the statement: "I believe that people who really want to die will find a way; it won't help to try and stop them." As discussed elsewhere in this report, that is an incorrect – if common – suicide myth. One quarter of survey respondents said they believed that people who threaten suicide are just trying to get attention. Again, this is a popular misconception that tends to minimize the legitimacy and danger of suicidal ideation, and one that reinforces stigma often felt by persons who are suicidal. Stigma was also a prevailing issue, as one-third of county survey respondents believed that people tend to like someone less if they are receiving help for a mental illness. Ten percent agreed with the statement, "I believe that depression is a sign of personal weakness." In terms of reaching out to a friend or family member for help with suicidal thoughts, there was some gender differences, as might be expected based on prevailing cultural norms. Nearly 83% of women responded positively about being comfortable asking for help, as compared to 74% of men.

Results from the Park County survey indicate prevalent mental illness among Wyoming families, as 68.2% of respondents report a personal or family history of at least one type of mental illness. Of those reporting a family history of mental illness, 72% reported depression and 31% reported bi-polar disorder; substance abuse was reported by 53% of those responding. A high percentage of persons in both Park (37%) and Sheridan (27%) counties stated that they believe there are inadequate local resources to help persons with mental illness.

The widespread stigma suggested by Wyoming's state and county survey results is part of a much larger national problem. Stigma associated with suicide and mental illness remains an obstacle to suicide prevention, as well a major barrier to individuals seeking mental health care, since youth and adults who endorse such stigma are less likely than others to seek help when needed (Bean, 2011). Education efforts about mental illness and the effectiveness of treatment can reduce the effects of stigma (Id.), but resources are scant and gauging the effectiveness of such efforts can be difficult. Notwithstanding the challenges, the issue of stigma in Wyoming is too important to ignore and the progress to be gained is too significant not to try.

- ***<u>Recommendation</u>: The Governor and other leading Wyoming public figures should develop a series of Public Service Announcements designed to (1) identify suicide as a public health priority in Wyoming; (2) to expose and correct misperceptions about mental illness and suicide, particularly with respect to men; and (3) to encourage individuals to seek help for themselves if they are in crisis or for family members and friends who may be in crisis.***

B. Prior Suicide Attempters & Inpatient Placement

Numerous studies have shown that a history of prior suicide attempts is one of the strongest predictors of completed suicide (Moskos, 2005). People who attempt suicide are at elevated risk for further attempts (12%-20%) and for subsequent suicide completion (1%-3%) within a year of the attempt (Vaiva, 2007). Death by suicide is 30 to 80 times more likely for persons who previously have attempted suicide, as compared to the general population (Choi, 2012). While it is functionally impossible to systematically identify members of this very high-risk group, the best point of intervention is most likely in an emergency room setting.

Yet the quality of care received by this high-risk population is often poor and sometimes deplorable. A survey of suicide attempt survivors revealed that more than 50% felt punished or stigmatized by emergency room staff and less than 40% believed that ER staff listened to them, discussed viable treatment options or took them seriously (Vega, 2007). Evidence-based strategies for the management and treatment of depressed and suicidal patients have been developed for use in emergency departments and can inform Wyoming in creating a uniform standard of care for this population (Chang, 2011).

Post-discharge follow up for these individuals can reduce re-attempt rates, as compared with treatment as usual, thus: "Attempts to improve community linkages after discharge appear to be simple but effective ways of preventing repeated suicidal behaviour [sic] and, perhaps, suicides" (Links, 2011). Even minimal post-discharge follow-up with suicide attempt survivors can realize appreciable reductions in re-attempt rates over the course of a year (Vaiva, 2007). Thus, in one study, the mere mailing of monthly handwritten notes to survivors resulted in a nearly 50% reduction in suicide re-attempt and completion rate (Vega, 2007).

- ***Recommendation: The Wyoming Hospital Association, Wyoming Medical Society, Wyoming Emergency Nurses Association, Wyoming Trauma Coordinators, Wyoming Office of Emergency Services and other stakeholders in the emergency medical services community should collaborate to create and implement uniform guidelines for emergency room treatment, discharge and post-discharge follow-up for suicidal patients.***

Inpatient treatment for mental illness and suicidality is a risk factor independent of the underlying condition. Suicide risk is elevated among patients who are discharged after being hospitalized for a psychiatric disorder (Choi, 2012), both in terms of eventual death by suicide (8.6% of those discharged will die by suicide) and immediate post-discharge suicide (10% of individuals who die by suicide have been released from an emergency department within the previous sixty days) (Hyde, 2011).

The Brief Intensive Treatment for Suicidal Individuals and Their Support Systems (BIT-SITSS) program, currently operational in Park County serves this vulnerable population. This project was funded by the Wyoming Department of Health in 2009 to improve emergent care for suicide attempters and to avoid, where possible, in-patient placement for attempters who could be better served by community-based alternatives. BIT-SITSS provides intensive outpatient treatment for suicidal clients and one or more supportive others identified by the client as necessary to their wellness. BIT-SITSS treatment protocols capitalize on the importance of supportive others in the treatment of suicidal patients and were developed in a manner that reduces the burden on the individual and provides assistance to the client's family and other support system. In developing

these treatment protocols, 11 primary goals were established: (1) avoid hospitalization and associated stigma; (2) reduce relapse; (3) strengthen the natural support system; (4) improve "family" functioning; (5) reduce anxiety; (6) decrease depression/dysphoria; (7) decrease stigma of seeking treatment; (8) decrease or eliminate suicidal ideation; (9) decrease hopelessness; (10) shorten recovery time; and (11) reduce costs associated with out-of-area treatment.

To qualify for BIT-SITSS, individuals must exhibit emergent suicidal ideation which under Treatment As Usual (TAU) would require hospitalization, and they must have supportive others who are willing and able to provide 24 hour watch in the suicidal individual's community until anxiety subsides. BIT-SITSS includes wrap-around case management to support the individual in alleviating catalyzing concerns such as burdensomeness or lack of purpose. This could involve helping the individual get a job, find housing, or to identify a purposeful volunteer role. Treatment sessions may occur in the provider's office but this is left to the discretion of the client. Sessions could occur in the home, a restaurant, a park or wherever the client prefers. Preliminary outcomes from this project have been very promising, with statistically significant decreases in depression, client relapse and frequency of emergent episodes, and shortened overall recovery time. This program has received national recognition and efforts are underway to conduct the rigorous evaluation necessary for inclusion in the National Registry of Evidence-Based Programs and Practices (NREPP).

A study of the long-term effectiveness of suicide prevention recommendations in the United Kingdom demonstrated that the recommendation most associated with decreased suicide rates among mentally ill persons (20% reduction) was the implementation of 24-hour crisis care teams that provided intensive treatment in the suicide patient's home that included social support and therapy (Cassels, 2012) – an approach strikingly similar to BIT-SITSS. Because preliminary data from the BIT-SITSS program indicates outcomes markedly better than either TAU or intensive outpatient treatment, it poses substantial opportunities for improved care for patients and a decrease in the suicide re-attempt rate for participants. Over time, these programmatic outcomes stand to produce cost savings to the state's medical community and mental health care system.

- ***<u>Recommendation</u>: The Brief Intensive Treatment for Suicidal Individuals and Their Support Systems (BIT-SITSS) should develop training manuals and operational guidelines for potential replication of BIT-SITSS as an evidence-based program. Data on programmatic outcomes and cost savings should continue to be collected and analyzed, and if warranted by such data and research, funding to replicate BIT-SITSS in other Wyoming communities should be secured.***

C. <u>Mental Illness and Substance Abuse</u>

Psychiatric illness is a major contributor to suicide death. By some estimates, as much as 90% of persons who complete suicide have a diagnosable mental health or substance abuse disorder under the standards set forth in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, more commonly referred to as the DSM-IV (Mann, 2005). These individuals are six times more likely to complete suicide than the general population (Center for Substance Abuse Treatment, 2008). It is estimated that about 60% of suicidal persons experience a mood disorder, principally depression or bi-polar disorder. Suicide need not be the destiny for most

would-be attempters, because of the range of improvements made in the diagnosis and treatment of mood disorders. Dr. John Mann has argued that suicide is predominantly a complication of a psychiatric disorder (Mann, 2002) and that proper treatment of high-risk psychiatric patients can reduce suicide rates. The key is ensuring that such "proper" treatment is consistently provided to person's seeking mental health services.

At least 25% of suicidal persons suffer from a diagnosable alcohol abuse disorder, with many experiencing co-occurring mental and substance use disorders (Center for Substance Abuse Treatment, 2008). The actual incidence of alcohol in suicide attempts and completions is unknown, but conservative estimate would place it above fifty percent. A combination of alcohol use and Post Traumatic Stress Disorder (PTSD) produces a tenfold increase in suicide risk (Violanti, 2004). Additionally, alcohol is a proximate causal agent for suicide given its disinhibiting nature (Center for Substance Abuse Treatment, 2008). Studies have shown that the reduction of youth alcohol misuse, particularly binge drinking and heavy drinking, may directly influence reductions in adolescent suicidal behavior (Rossow, 2007). Similarly, reducing access to alcohol appears to have a mitigating effect on youth suicide rates; for example, the raising of the minimum drinking age to 21 resulted in an 8% reduction in youth suicides (Miller, 2010).

- ***<u>Recommendation</u>: Mental health providers and primary care and public health practitioners should be trained in early detection and intervention for alcohol problems through the Screening, Brief Intervention, and Referral for Treatment (SBIRT) model or other evidence-based alcohol intervention protocols.***

Almost all (97%) mental health professionals encounter suicidal clients during the course of their career, and some clinical staff work with suicidal inpatients and outpatients on a daily basis (Schmitz, 2012). Loss of a patient to suicide is so frequent for psychiatrists (50% report at least one patient suicide death) and mental health counselors and social workers (roughly 30% report at least one patient suicide death) that it has been called an "occupational hazard" of the profession (Id.). Multiple mental health boards and agencies have established that suicides in inpatient settings should never occur, and yet they are reported with some regularity; in fact suicide is one of the five most frequently reported unexpected hospital event causing serious injury or death (Id.). In 80% of those cases, absent or inadequate patient assessment for suicide event is listed as the root cause of the incident (Id.).

- ***<u>Recommendation</u>: Appropriate protocols should be established to ensure that individuals lacking appropriate graduate/professional training and supervised experience are not entrusted with the assessment and management of suicidal persons in an inpatient environment.***

The lack of standardized clinical care for suicidal clients has been a major challenge for practitioners until relatively recently. As one authority has postulated: "Simply put, scant data exist about what actually works in terms of assessing and treatment of suicidal patients" (Jobes, 1995). Surveys of practicing clinicians revealed they frequently rely upon key questions and observations during face-to-face interviews with patients rather than employing accepted suicide identification instruments with established validity and reliability measures (Id.). When examining communication between caregivers and parasuicidal patients before their attempted suicides, it has been found that many of these communications did not address the possibility of

suicide and when the topic of suicide was broached the level of suicidal thinking was frequently not explored or documented (Coombs, 1992).

In response to the issues of inconsistent or informal treatment of those referred for treatment of suicide, Dr. David Jobes and colleagues developed a clinical approach to suicidality called the Collaborative Assessment and Management of Suicidality (CAMS) (Jobes, 2005). The CAMS approach involves the patient and clinician sitting side by side to rate the nature and risk of the patient's suicidality. The patient and clinician work together in the same way to tailor an individual treatment plan. Their study, conducted in an Air Force treatment facility found the CAMS approach resulted in resolving patient's suicidality in fewer treatments than Treatment As Usual (TAU). Application of these new methodologies by Wyoming providers is not universal and may be the exception rather than the rule.

- ***Recommendation: The University of Wyoming and Wyoming's community colleges should incorporate appropriate educational components that include state-of-the-science suicide prevention risk assessment, depression management and treatment for suicidal ideation in their undergraduate and graduate-level psychology, social work and other behavioral health-related degree programs.***

Another new program specific to suicide risk assessment is Assessing & Managing Suicide Risk (AMSR), a one-day, research-based workshop for mental health professionals, including social workers, licensed counselors, psychologists, and psychiatrists. AMSR focuses on eight core competencies required for clinicians to be successful in their work with suicidal clients. The core competencies are based on empirical evidence and expert opinion. While the AMSR core competencies are not intended as a standard of care, they do represent essential clusters of knowledge, skills, abilities, and perceptions. Continuing education credits are available from the National Association of Social Workers, National Board for Certified Counselors and Affiliates, American Psychological Association, as well as Continuing Medical Education credits. Wyoming has one clinician who is certified to provide the AMSR workshop. To date, six workshops have been provided in the state, with 200 mental health practitioners trained.

- ***Recommendation: The Wyoming Suicide Prevention Program should sponsor at least one annual AMSR training in the state; the Wyoming Department of Health will work with the Wyoming Association of Mental Health and Substance Abuse and Centers and the Mental Health Planning Council to promote and encourage attendance by its constituent providers.***

Suicide treatment protocols have changed in response to both managed care and empirical studies. Extended hospitalization for suicidality is no longer the norm. Three- or four-day hospital stays with outpatient follow-up are the new standard (Jobes, 2008). Important to any program is a thorough assessment of risk. Recently this has shifted the focus towards targeted warning signs including hopelessness, rage, reckless behavior, a feeling of being trapped, increased substance abuse, social withdrawal, anxiety/agitation, dramatic mood change, feelings of purposelessness (Rudd, 2006). Targeting these attributes recognizes the contributions of the theoretical inputs mentioned earlier. Effective treatment procedures include developing new cognitive and behavioral skills for the patient as well as formulating a plan if suicidal thoughts resurface. As in the CAMS approach mentioned above, these are best designed with the patient's input. Jobes and colleagues caution against over relying on drug therapies for treating suicide

because of poor drug compliance among clients and recent studies questioning the efficacy of these treatments. The BIT-SITSS program takes this a step further, by attempting to avoid any institutional placement for persons presenting with suicidality, and even for suicide attempters who otherwise may be appropriate candidates for community-based treatment services.

Because of the inadequacies found throughout the mental health education and practice systems, a special task force of the American Association of Suicidology (AAS) recently reviewed the current state of mental health education and training in the United States. In June 2012, the AAS issued a series of recommendations designed "to ensure that mental health professionals are properly trained and competent in evaluating and managing suicidal patients, the most common behavioral emergency situation encountered in clinical practice" (Schmitz, 2012). The adoption of key mental health service recommendations in Great Britain realized systems-wide reductions in patient suicide deaths (While, 2012). These studies suggest that Wyoming practitioners should be encouraged to increase their professional competencies in the area of suicide assessment and treatment.

- ***<u>Recommendation</u>: State licensing boards should require suicide-specific continuing education as a requirement for the renewal of every mental health professional's license.***

D. <u>Suicide Risk Assessment and Primary Care</u>

Primary care providers (PCPs) are uniquely positioned to reduce suicide attempts and deaths, since 83% of people who complete suicide have seen their PCP in the year preceding their death and two-thirds within the preceding month (Mann, 2005). About one-fifth of suicide victims saw a doctor within the week immediately prior to their death (Graham, 2011). This is considerably higher than the 25%-33% of suicidal persons who consulted with a mental health professional in the year prior to their death (Id.). In addition to recognizing and responding to imminent suicide risk, PCPs are able to address the depression, addictive disorders or other underlying conditions that could predispose vulnerable individuals to self-destructive thoughts and acts. The reach of PCPs may be even greater in the more frontier parts of Wyoming, where primary care practitioners are the sole local resource for medical and mental health services.

Given the proximal relationship between PCPs and most suicidal behaviors, "The ability of PCPs to identify suicidal patients and facilitate appropriate interventions may be one of the most important factors in any public effort to reduce death by suicide" (Graham, 2011). An exhaustive review of existing suicide prevention interventions by the American Medical Association (AMA) found that educating primary care physicians on the management of depression and suicidal ideation was among the most promising practices for suicide prevention (Mann, 2005). Indeed, the AMA study estimated that the education of primary care physicians would lead to a decline in suicide rates of 23%-73% (Links, 2011). Because a system of properly trained and responsive PCPs offers perhaps the greatest potential to reduce suicide death rates at a systems level, it is important to consider the state of the current primary care system. Upon review, the prognosis is not promising.

Research shows that PCPs do not routinely screen for suicide, even among patients who exhibit signs of depression; nor are most PCPs confident about their ability to detect suicide or to make appropriate referrals (Graham, 2011). This is an important treatment gap. George S. Alexopoulos, MD, Professor of Psychiatry at Weill Medical College of Cornell University notes:

"Routine assessment of suicidal ideation in depressed patients is necessary as these patients will rarely explicitly inform their physicians about suicidal thoughts or plans" (PDV Foundation, 2009). Further research suggests that many PCPs routinely fail to accurately diagnose mental illness or ask about suicide – indeed, one recent study indicated that PCPs accurately identified suicidality about 25% of the time, and when it was identified they typically failed either to treat it or to refer the patients for mental health services (McDowell, 2011).

Depression – a key precursor to suicide in as much as 60% of completed suicides – is inadequately treated in primary care settings, with more than 40% of depressed primary care patients receiving no antidepressant treatment, regardless of age and medical comorbidity (PDV Foundation, 2009). With respect to older adults, many PCPs assume that depression is a "natural" consequence of aging (Conwell, 2001), and therefore some doctors may not be motivated to take actions necessary for successful diagnosis and/or identification of suicidal ideation. Of those patients who do receive antidepressants, insufficient dosages, inadequate treatment time, and poor treatment adherence by patients can compromise the care of depressed patients from primary care practitioners.

Factors contributing to the under-recognition of depression and suicide risk by PCPs include lack of knowledge regarding the symptoms and management of depression, the failure to elicit mood or cognitive symptoms (i.e., screening and assessment), and fear of stigmatizing the patient (Conwell, 2001). Other reasons include insufficient time to spend with patients, inadequate training, discomfort or personal biases about mental disorders, and fear of reprisal or litigation. When doctors do refer out their patients for psychiatric or mental health consultations, the likelihood that the referred patient will actually seek it out is not good; in fact, research shows that the majority – more than 80% – of depressed primary care patients prefer to be treated by their PCP instead of a mental health specialist (PDV Foundation, 2009).

A comprehensive review of suicide preventive interventions by PCPs for older adults (Conwell, 2001) yielded the following relevant recommendations: (1) routine use of validated, self-administered depression screening tools in PCP settings; (2) better PCP diagnosis and treatment of depression in older patients, including improved linkages to mental health community; and (3) better training and continuing education of professional medical, nursing and social work professionals in depression/suicide among older adults. Recommendations from the Rural Youth Suicide Prevention Workgroup convened by the Suicide Prevention Resource Center and the State & Territorial Injury Prevention Directors Association that could be implemented in Wyoming include training public health nurses and other mid-level primary care providers on assessing and managing depression and suicidality and promotion of mental health screening (Rural Youth Suicide Prevention Workgroup, 2008). In addition, creating linkages between primary care doctors and mental health providers (who provide treatment and follow-up services) and gatekeepers (who may be the persons first identifying suicide risk) can result in persons receiving treatment with as little stigma as possible (Bean, 2011).

The above discussion clearly highlights the importance of ensuring that Wyoming's primary care providers have some minimal competencies in effectively dealing with depressed patients and in recognizing and adequately responding directly to suicide risk. Given the key role played by public health nursing and private nurse practitioners in Wyoming's healthcare system, enhancing suicide risk assessment and management skills for this group is of critical importance. Existing evidence-based online training tools and workshops, such as the *Impact* program for primary

care depression management and the *Recognizing and Responding to Suicide Risk in Primary Care,* could be provided to Wyoming PCPs at little to no cost.

- ***Recommendation:*** ***The Wyoming Board of Medicine, Wyoming Medical Society, Wyoming Association of Osteopathic Physicians and Surgeons, Wyoming Association of Psychiatric Physicians, Wyoming Association of Physicians Assistants, Wyoming Primary Care Association, Wyoming Hospital Association and other stakeholders in the medical community should collaboratively develop educational competencies and training tools for physicians and physician assistants for the diagnosis and management of depression, routine screening of clients for mental health issues and suicide, and suicide intervention.***
- ***Recommendation:*** ***The Wyoming State Board of Nursing and Wyoming Nurses Association should develop minimum core competencies in suicide risk assessment and management and continuing education requirements in suicide prevention for registered professional nurses, licensed practical nurses, and certified nursing assistants.***
- ***Recommendation:*** ***The Wyoming Suicide Prevention Program should collaborate with the Wyoming Primary Care Association, the Wyoming Medical Society and other state and community organizations to distribute the Suicide Prevention Resource Center's Suicide Prevention Toolkit for Rural Primary Care to all primary care practices and clinics in Wyoming and to provide technical assistance to primary care staff on implementing and operationalizing the strategies set forth in the toolkit.***

E. Access to Firearms

In some respects, suicide is an act of opportunity, and there is powerful empirical evidence that many, if not most, suicides are impulsive. A classic study of 515 persons prevented from jumping from the Golden Gate Bridge found that 94% of those survivors had died from natural causes or were still alive 25 years later. The belief that serious suicide attempters who are initially thwarted will inevitably "just go somewhere else" to kill themselves is clearly unsupported by the data: "Instead, the findings confirm previous observations that suicidal behavior is crisis-oriented and acute in nature. Accordingly, the justification for prevention and intervention…is warranted and the prognosis for suicide attempters is, on balance, relatively hopeful" (Spielmann).

Ease of access to lethal means during a suicidal crisis influences the suicidal person's behavior (Sarchiapone, 2011). A 1985 study of survivors of self-inflicted gunshot wounds revealed that more than half of these attempt survivors had contemplated suicide for less than 24 hours (Anderson, 2008). In a 2001 study of near-lethal suicide attempt survivors between the ages of 13 and 34, only 13% reported having suicide impulses of more than eight hours – to the contrary, 70% of survivors put the interval between making the decision to kill themselves and the suicidal act at less than an hour, including an astonishing 24% who placed the interval at less than five minutes (Id.).

Because most suicidal crises are short lived, if access to the suicidal person's preferred lethal means can be deferred or delayed, there is a likelihood that the crisis may pass before the impulse can be acted upon (Sarchiapone, 2011). This is particularly compelling given that research suggests that many, if not most, individuals who are able to make it through a suicidal crisis will never go on to attempt suicide (Id.). Even in those cases where the suicidal person attempts suicide with a less lethal means, there is a greater possibility the person will survive the suicide attempt and receive help to prevent future attempts (Id.). In fact, studies have consistently shown that less than ten percent of those who are diverted from serious suicide attempts or who survive near-lethal attempts will eventually die by suicide (Anderson, 2008). This directly contradicts a prevailing suicide "myth" that prevention is ineffective in principal since those determined to die will eventually do so one way or another.

Firearms are the means of choice for suicidal Wyomingites – a particularly ominous fact, given that firearms have a much greater fatality rate (91%) than any other commonly employed suicide method; for example, poisoning accounts for 74% of suicidal acts but has only a 2% fatality rate (Brewer, 2010). "Where there are guns there are more people completing suicides. … The mere presence of a firearm in a home significantly increases the risk of completed suicide for the population as a whole and for every age group" (Brewer, 2010). The overall risk of suicide in households who keep guns on the premises is two-ten times that of households where no gun is present (Miller, 2012) and suicidal individuals living in households where firearms are present are 700% more likely to plan their death with a gun than those who do not have such immediate access (Betz, 2011). Suicidal adolescents are most likely to kill themselves at home with a gun owned by a parent (Johnson, 2010). The risk posed by household guns is especially high in Wyoming, which has the nation's highest rate of gun ownership (North Carolina State Center for Health Statistics, 2012) and the highest rate of suicide by firearm in the country over the past decade, at more than two-thirds of all completions.

Given the controversial nature of means restriction with respect to firearms, this is a frequently ignored suicide prevention strategy. As a result, most mental health providers, social workers and primary care physicians are not trained in techniques for counseling at-risk clients concerning firearm safety assessment (Brewer, 2010). This training gap has potentially lethal consequences, since family members who receive counseling in how to restrict firearm access by persons at risk of suicide (either through off-site storage or locking them out of reach until the situation improves) are more likely to take protective action than family members who do not receive such counseling (Betz, 2011). Research further suggests that the benefits of restricting firearm access exist even when considering that some suicidal persons may choose an alternative means of suicide (Brewer, 2010). Means restriction efforts are particularly effective when – as is true with guns – the means is popular, highly lethal, readily available and not easily substituted by similar methods (Sarchiapone, 2011). A wealth of scientific evidence has established that policies reducing firearm access can substantially reduce suicide fatalities, particularly among adolescents and young men (Lubin, 2010). A public health approach to restricting lethal means, thereby reducing firearms suicides, has been found highly effective with little displacement to other means (Slater, 2011). The AMA study referenced above likewise found means restriction among the top three interventions for reducing suicide rates in the United States (Mann, 2005).

From a purely scientific perspective, a strategy that includes some manner of firearms restriction for at-risk individuals should be central to Wyoming's suicide prevention efforts.

Notwithstanding the strength of the research, any initiative regarding firearms has the inherent potential for a great deal of controversy – or as Casper Star-Tribune staff writer Tom Morton describes it: "Touching the third rail of Wyoming culture: guns and suicide" (Morton, 2011). The challenge becomes how to properly frame the issue in a culture where the right to bear arms is fundamental. As a threshold matter, it is recommended that any conversation about access to firearms center on gun safety, not restriction; that is, the goal is solely to keep guns away from persons at imminent risk of suicidal crisis in the least restrictive way possible.

Another obstacle is a widespread misconception among Wyoming residents concerning the efficacy of means restriction as a component of preventing suicide. As the 2005 Wyoming Stigma Survey discussed above shows, more than three quarters of Wyoming residents do not believe reducing access to firearms would lower suicide rates. This misperception must be corrected before eliciting public support for restricting access to guns by suicidal and high-risk persons. Developing an effective, unified message on this issue is fundamental, but will likely require considerable planning and research, as well as an extended public conversation. In the immediate future, it would be useful to consider more narrowly tailored efforts.

Experts in the field universally support counseling clients about access to lethal means as a best practice for suicide prevention. This begins with training primary care practitioners and mental health providers how to talk about the safe storage of household firearms with their patients who may be at elevated risk of suicide (e.g., those with depression, drug and alcohol problems, histories of interpersonal violence), and not just those who are actively suicidal (Caine, 2012). Ideally, these conversations occur in advance of a suicidal crisis, when the at-risk individual is best able to act in his or her own enlightened self-interest. Practical guidelines for primary care providers on gun safety management are readily available in the public domain (e.g., Simon, 2007) and could be tailored for use by Wyoming practitioners. Free web-based trainings for medical professionals on how to counsel at-risk clients on gun safety can be completed in an hour or so.

- ***<u>Recommendation</u>: Boards and organizations supervising the credentialing of Wyoming medical providers and mental health practitioners should develop a mandatory continuing education requirement for counseling at-risk clients and families about access to lethal means, such as the Counseling Access to Lethal Means online course developed by the Harvard School of Public Health in partnership with the Suicide Prevention Resource Center.***

Engaging gun owners and gun shops, hunters, firearms advocates such as the Wyoming Chapter of the National Rifle Association, and other stakeholders in developing best practices for preventing firearm suicides should be another priority initiative. This group would provide leadership and focus on how best to provide enhanced safety for high-risk individuals while preserving traditional values surrounding gun ownership. A potential model for this project is the New Hampshire Firearm Safety Coalition (NHFSC), which includes gun shops and firing ranges, injury prevention and mental health advocates, researchers and committed volunteers. Despite being a politically conservative state with strong cultural norms around gun ownership, the NHFSC took on the issue of suicide prevention in 2009, in reaction to a series of three gun sales from a single owner in less than a week that resulted in suicides within hours of the guns being purchased. The New Hampshire initiative seeks "to engage gun shop and range owners, their employees and their customers on preventing suicide, the number one type of firearm death

in the U.S." (New Hampshire Firearm Safety Coalition). Materials distributed by the NHFSC include brochures, posters, FAQs, a Firearm Purchasing Checklist for gun shop owners that has a statement about suicide, and an educational video about the role of gun shops in preventing suicide that can be viewed at: http://www.youtube.com/watch?v=97Fu2qmShZg. More information about the NHFSC can be found at www.nhfsc.org.

Once established, the firearms safety coalition would serve as the central agency in Wyoming for educating firearms groups and gun sellers about how to help protect their constituencies from suicide. Another action step for this group would be to work with the Wyoming Association of Sheriffs and Chiefs of Police and/or local law enforcement agencies to disseminate uniform practices and protocols for the safe removal and temporary storage of firearms from households that wish to protect at-risk individuals (Caine, 2012).

- ***Recommendation: The Governor should establish a Wyoming Firearm Safety Coalition for the purpose of adopting best practices and tools for gun shop owners and others on how to avoid selling firearms to suicidal persons and how to educate customers about methods to protect persons at high-risk of suicide from self-harm with firearms.***

F. Adverse Life Events

Completed suicide commonly consists of a two-fold dynamic: mental illness coupled with impulsivity or aggressive tendencies (Moskos, 2005). In many cases – particularly among adolescents – this dynamic is exacerbated by psychological stressors, such as personal loss or other adverse life event (Id.). Research has demonstrated that both suicide attempters and victims tend to experience major distressing life events in the period preceding their suicidal behavior that may exacerbate their emotional/mental state and precipitate suicidality (Maltsberger, 2003). These can be of an interpersonal, medical, legal, financial or employment nature, or a combination of stressors; even one such life event is often sufficient to trigger a suicidal act (Id.). An examination of patterns of suicide over time among United States citizens of prime working years confirms a strong association between suicide and business cycles (Luo, 2011). There exists a distinct correlation between financial stress and suicide attempts and completions (Kidger, 2011), and a recent study of stressful life events and suicide noted a particularly strong association between suicide and financial stress (Wang, 2012). This finding illustrates the value of embedding suicide prevention education and risk alertness training in governmental programs providing public assistance, such as unemployment and Medicaid benefits and programs for children and families.

- ***Recommendation: The Wyoming Departments of Family Services, Health, Workforce Services and such other state agencies as may provide services to at-risk individuals should develop and implement mandatory staff training on suicide risk recognition and response for all personnel who have direct contact with individuals at risk for suicide and their families.***

Private sector employment also provides an important pathway for prevention, particularly for working adults who may not be easily captured in other "systems" such as the public education system for youth and the aging and long-term care systems for older adults and persons with disabilities. "The challenge for aligning priorities of preventing suicide and their antecedent risk factors with corporate priorities requires a fundamental change in corporate culture and values

[that will] depend upon establishing a powerful business case regarding the co-incident benefits to companies and their employees" (Caine, 2003). Efforts that engage first-line supervisors in early detection and recognition, and which encourage self-reporting by employees will be particularly valuable. "This type of initiative will require heavy investment in sustainable education and 'wellness' programs, where the corporation and its EAP have a well-thought strategic plan for initial dissemination, continuing exposure, and rigorous monitoring of utility" (Id.). For employees who are near-symptomatic or at imminent risk of suicide, appropriate confidentiality protocols will need to be developed.

- ***<u>Recommendation</u>: The Governor should appoint a special task force of public-sector executives and industry and business leaders to develop and implement suicide prevention education and outreach resources for Wyoming's employers.***

G. <u>Victimization, Childhood Trauma and Bullying</u>

Victimization is a suicide risk factor for teens and young adults, and bullying (whether as victim or perpetrator) has been shown to have a particularly strong impact on youth suicidality (Epstein, 2009 A recent study indicated that men and women alike who have been physically abused are about 500% more likely to be suicidal than those who have never suffered such abuse (Fuller-Thompson, 2012). Other risk factors associated with higher suicide risk include substance use, mental and emotional disorders, fighting, sexual activity and poor physical health (Id.). Moreover, both bullying and childhood sexual abuse have been linked to suicidal behaviors later in life (Andover, 2007).

Because bullying is an issue of growing public concern, a closer examination of the problem and potential solutions is warranted.[3] Both victims and perpetrators of bullying are at a higher risk for suicide than their peers, with children who are both victims and perpetrators of bullying at the highest risk (Kim & Leventhal, 2008; Hay & Meldrum, 2010; Kaminski & Fang, 2009). All three groups (victims, perpetrators, and perpetrator/victims) are more likely to be depressed than children who are not involved in bullying (Wang, Nansel et al., in press). Bullying is associated with increases in suicide risk in young people who are victims of bullying (Kim, Leventhal, Koh, & Boyce, 2009) as well as increases in depression and other problems associated with suicide (Gini & Pozzoli, 2009; Fekkes, Pipers, & Verloove-Vanhorcik, 2004). Victims of cyberbullying are also at risk for depression. One study found that victims of cyberbullying had higher levels of depression than victims of face-to-face bullying (Wang, Nansel et al., 2010).

A review of the research indicates that there are personal characteristics that increase a child's risk of being bullied (Arseneault, Bowes, & Shakoor, 2010). These personal characteristics include internalizing problems (leading to withdrawal and anxiety/depression); low self-esteem and low assertiveness; and aggressiveness in early childhood (which can lead to rejection by peers and social isolation). Because many of these characteristics are also risk factors for suicidal behavior, it often may be the children most at risk for suicide who are bullied, which in turn further raises their risk of suicide (as well as of anxiety, depression, and other problems associated with suicidal behavior). Bullying, and especially chronic bullying, has long-term effects on suicide risk and mental health that can persist into adulthood (Arseneault et al., 2010). One review of the research concluded that bullying can cause (or contribute to) "comparatively

[3] The following discussion is excerpted with minimal changes from *Suicide and Bullying: Issue Brief*, Suicide Prevention Resource Center, http://www.sprc.org/library_resources/items/suicide-and-bullying-issue-brief.

low levels of psychological well-being and social adjustment and to high levels of psychological distress and adverse physical health symptoms" (Rigby, 2003).

Evidence for the effectiveness of school-based bullying prevention programs is mixed. An analysis of whole-school prevention programs concluded the following: "It is clear that the whole-school approach has led to important reductions in bullying in a number of cases, but the results are simply too inconsistent to justify adoption of these procedures to the exclusion of others" (Smith, Schneider, Smith, & Ananidaou, 2004). A meta-analysis of bullying prevention programs found that although "school bullying interventions may produce modest positive outcomes, that they are more likely to influence knowledge, attitudes, and self-perceptions rather than actual bullying behaviors" (Merrell, Gueldner, Ross, & Isava, 2008).

There is some support for the use of whole-school approaches, yet there are "significant barriers" to their success, including the difficulty of implementing these programs and the characteristics of school environments and student bodies that may affect program outcomes (Vreeman & Carroll, 2007). One meta-analysis concluded that school-based, anti-bullying prevention programs reduced bullying and victimization by an average of 20%–23% (Farrington & Ttofi, 2009a). This analysis concluded that while programs such as Olweus are among the most promising, they are less effective in the United States than in Europe (Id.). Research further suggests that the effectiveness of whole-school approaches to bullying prevention may be exaggerated because evaluations of these programs often depend on self-reports by students (Swearer et al., 2010), and may suffer in their implementation because of a lack of change in the social environment that promotes bullying. Similar to school-based suicide prevention programs, anti-bullying efforts are sometimes criticized as being designed to reach all students when only a small percentage engage in the problem behavior.

There is little research on how suicide prevention and bullying prevention programs may be used together. Researchers and public health practitioners have raised the possibility of more comprehensive prevention efforts, arguing that "the continued search for effective bullying interventions ... should not be limited strictly to interventions that are labeled 'antibullying programs' but also consider behavioral interventions that are universal in nature as well as those that target the specific problems associated with bullying in schools" (Merrell et al., 2008). Given the risk factors common to interpersonal and self-directed violence, the Centers for Disease Control and Prevention's Strategic Direction for the Prevention of Suicidal Behavior recommends the promotion of social support, participation, cohesion, and integration, as well as the reduction of social isolation, as primary strategies to prevent suicide and violence (CDC, n.d.). There is a potential for schools to develop programs that will identify students at risk for a range of behavioral health problems, including suicidal behavior and conduct problems, and help the students address these issues (Zenere & Lazarus, 2009). A review of comprehensive school-based prevention programs does suggest that these programs, if implemented with fidelity, can help prevent suicidal behavior (May, Sema, Hurt, & DeBruyn, 2005; Kalafat, 2003).

Bullying prevention and suicide prevention share common strategies in three areas: (1) school environment, (2) family outreach, and (3) identification of students in need of mental and behavioral health services (and helping these students and their families find appropriate services). The fact that bullies and their victims share some risk factors (e.g., depression) and that the victims of bullying may be at risk partially because of personal risk factors (e.g., anxiety disorders) suggests that both suicide and bullying can be prevented using strategies to identify

and treat students with these risk factors, but no substantial research has been done on this approach.

At the same time, attempts to find and use overarching prevention strategies and "move upstream" from problem behaviors, such as bullying and suicide, should not ignore the need for interventions that target specific behavioral health problems. This could include the following: policies and procedures for identifying and responding to young people at risk for suicide, including staff training and linkages with community mental health centers (Substance Abuse and Mental Health Services Administration, in press); components focusing on the specific risk and protective factors relevant to LGBT youth, including those relating to bullying and other forms of harassment based on sexual orientation (SPRC, 2008); and elements that seem to be particularly successful in preventing bullying, including effective disciplinary measures, adult supervision (especially on the playground), educating parents about bullying, and creating a school culture that does not support bullying (Farrington & Ttofi, 2009b). It is important than any anti-bullying initiative keep up with technology. Bullying often takes place in areas hidden from adult supervision. Cyberspace has become such an area. At the same time, young people may also use social media and new technologies to express suicidal thoughts that they are unwilling to share with their parents and other adults. Both bullying prevention programs and suicide prevention programs need to learn how to navigate in this new world.

It is clear from the research that bullying, both as an independent problem and as a risk factor for suicide, is a complicated issue that is not susceptible to quick or easy solutions. More study and greater cross-agency collaboration is required to develop a comprehensive public health strategy for preventing bullying in Wyoming.

- ***<u>Recommendation</u>: The Governor and Superintendent of Education should appoint a special task force on bullying and suicide prevention to develop a state action plan for Wyoming public schools and communities.***

Lesbian, gay, bisexual and transgender (LGBT) youth experience much greater harassment and bullying (including physical violence and injury) at school than their heterosexual peers (Garofalo, Wolf, Kessel, Palfrey, & Durant, 1998; Bontempo & D'Augelli, 2002; Berlan, Corliss, Field, Goodman, & Austin, 2010). It is estimated that 90% of LGBT teens reported being verbally or physically harassed or assaulted based on their sexual orientation (Harris Interactive & Gay, Lesbian, and Straight Education Network, 2005). In the words of one expert, LGBT adolescents "must cope with developing a sexual minority identity in the midst of negative comments, jokes, and often the threat of violence because of their sexual orientation and/or transgender identity (Morrow, 2004). Although no independent data on the subject is available specific to Wyoming, anecdotal evidence suggests that bullying of this population is rampant across the state.

Not surprisingly, LGBT youth attempt suicide at a rate two to four times higher than that of their heterosexual peers (Suicide Prevention Resource Center, 2008). A recent review of the research identified 19 studies linking suicidal behavior in lesbian, gay, and bisexual (LGB) adolescents to bullying at school, especially among young people with "cross-gender appearance, traits, or behaviors" (Haas et al., 2011). Accordingly, special attention should be given to the needs of LGBT youth and young people who do not conform to gender expectations.

- ***<u>Recommendation</u>: The Departments of Health and Education should collaborate to provide a series of community LGBT workshops on cultural competencies and suicide prevention for school staff and youth services providers.***

H. <u>Lack of Connectedness</u>

The Centers for Disease Control and Prevention (NCIPC, 2008) stress the important of "connectedness" as a central and organizing principle of suicide prevention:

> Over the past three decades, scientific research and conceptual thinking have converged to suggest that suicidal behavior results from a combination of genetic, developmental, environmental, physiological, psychological, social, and cultural factors operating through diverse, complex pathways. In 2001, multiple agencies and sectors collaborated on publication of the National Strategy for Suicide Prevention, designed as a comprehensive and integrated approach to addressing suicide as a public health problem. One of the National Strategy's primary aims is to promote opportunities and settings to enhance connectedness among persons, families, and communities. Connectedness is a common thread that weaves together many of the influences of suicidal behavior and has direct relevance for prevention. Accordingly, CDC has adopted as its theme "Promoting individual, family, and community connectedness to prevent suicidal behavior" to define this area of prevention. We define connectedness as the degree to which a person or group is socially close, interrelated, or shares resources with other persons or groups. This definition encompasses the nature and quality of connections both within and between multiple levels of the social ecology, including
>
> - Connectedness between individuals;
> - Connectedness of individuals and families to community organizations; and
> - Connectedness among community organizations and social institutions.
>
> This definition also comprises a wide range of concepts linked in the literature either theoretically or empirically to suicidal behavior, including social support, social participation, social isolation, social integration, social cohesion, and social capital. Theory and research addressing the association between connectedness and suicidal behavior date back to Durkheim, but later evidence continues to support the association. Numerous pathways have been proposed through which connectedness may contribute to better health and well-being.

There is no question that systems-level promotion of "connectedness" and positive mental health are laudable, and perhaps capable of achieving the greatest gains in terms of permanently reducing a host of risk factors that contribute to suicide. This is strongly supported by the Institute of Medicine's groundbreaking study, *Preventing Mental, Emotional, and Behavioral Disorders Among Young People*, which confirms the importance of protecting youth from suicide through the promotion of positive behaviors – within schools, families and communities. Instead of stressing only deficits and the reduction of risk factors, it is imperative that prevention take on a strengths-based approach that promotes resiliency and other protective factors (IOM, 2009). As asserted by Dr. Teresa Lafromboise, member of the IOM Committee on Prevention of

Mental Disorders and Substance Abuse Among Children, Youth and Young Adults, "We now have data that students who participate in both social and emotional development activities do have higher achievement test scores…So there is good reason for school superintendents and administrators to allocate use of classroom time for social and emotional development" (PDV 2011). The IOM report further recommends that prevention approaches be coordinated with schools and PTOs, churches and civic groups, families and extended groups and community leaders. Important partners are local Boys & Girls Clubs, YMCA/YWCA programs, Big Brother Big Sister organizations and other after-school programs for youth.

There is no question that improving connectedness in Wyoming's schools and social institutions and enhancing the resiliency of our young people are important values of themselves and as strategies to reduce suicidal behavior. The goal is laudable and far-reaching, yet capacity and resources are limited. A suggested first step is to consider implementing specific programs that have been scientifically shown to reduce risk factors and improve protective factors that are associated with suicide. One such program that is identified in the 2009 IOM report is the Good Behavior Game, a program that divides elementary school classes into teams and reinforces desirable behaviors with rewards such as extra free time and other privileges. Studies have shown that the program considerably reduces aggressive and disruptive behavior during first grade. The one-year intervention also has benefits over the long term by lowering students' risk of alcohol and drug abuse, as well as decreasing rates of suicidal thoughts and attempts over the lifespan. Emerging research strongly suggests that early childhood development through programs such as the Good Behavior Game is an investment that produces multiple returns over the lifespan.

- ***<u>Recommendation</u>: The Departments of Education and Health should work directly with public school districts and individual schools to implement the Good Behavior Game in Wyoming's public elementary schools.***

Another program that offers discrete improvements of connectedness within the public education context is a strengths-based peer leadership program called Sources of Strength. This NREPP-listed best practice has been shown to enhance protective factors associated with reductions in suicidality by improving cultural norms within participating schools, increasing referrals by trained peer leaders, and enhancing perceptions of adult support by those students most at risk for suicide (Wyman, 2010).

- ***<u>Recommendation</u>: The Departments of Education and Health should work directly with public school districts and individual schools to implement the Sources of Strength program or other strengths-based peer mentoring programs in Wyoming to increase student resiliency and coping skills and promote help-seeking behaviors by students in crisis.***

An examination of the prevailing suicide theories suggests there should be a role for family and important others in suicide treatment. There are accounts in the literature of suicide programs targeting youth that include family and friends of patients but little describing similar programs for adults. Shneidman's concept of psychache, Joiner's connection of burdensomeness and alienation to suicide, and to a lesser extent, Beck's identification of the role of hopelessness in suicide, suggest interaction with family and others is important to recovering from suicidal thoughts. Several programs recognize and capitalize upon the importance of family in recovery

(Diamond, 2010), including the Wyoming BIT-SITSS program discussed above. These programs seek to decrease stress on patients by reducing familial conflicts. They also work to strengthen family coping mechanisms and reframe interactions so as to make the family a supportive element in the patient's life (Piacentini, 1995).

An evidence-based program for parents cited in the 2009 IOM report is the Positive Parenting Program. This program uses a range of approaches, from a television series on how to handle common child-rearing problems to in-person skills training for parents struggling to handle children's aggressiveness or lack of cooperation. These methods have been shown to lower kids' disruptive behaviors, a positive change that persisted one year later. In reviewing gaps within the existing suicide prevention system, parent involvement is a critical area that should be enhanced.

- ***Recommendation: The Departments of Education and Health should encourage and assist public school districts and individual schools in implementing the Positive Parenting Program and other evidence-based programs to increase parental competencies in the mental health of their children in Wyoming's public schools.***

It has been noted that "the importance of enhancing family support in youth suicide prevention cannot be overemphasized because of its broad protective influence against youth suicidal behaviors" (Thompson, 2005). Detection of self-harming and suicidal behaviors among children by parents increases the likelihood of professional help-seeking, and thus improves the potential for positive outcomes (Motjabai, 2008). Regrettably, this behavior often goes undetected and parents are not consistently aware of their children's history of self-harm (Motjabai, 2008). Improved suicide prevention education and outreach efforts for Wyoming's parents are important components of a comprehensive statewide suicide prevention initiative.

- ***Recommendation: The Governor should appear in a Public Service Announcement appealing to parents to learn the warning signs of suicidal behaviors in their children.***
- ***Recommendation: The Wyoming Departments of Education, Family Services and Health should develop and distribute to parents educational materials on suicide risk recognition and resources, including brochures and a web-based training for parents to be housed on one or more state-owned websites.***

VII. Men and Suicide – Confronting the Problem

As discussed above, the data overwhelmingly establishes that adult men drive Wyoming's high suicide rate. This informs prevention efforts, since: "Any prevention effort that seeks to develop a high level of effectiveness must give careful attention to those approaches that 'capture' large elements of the general population, as well as those who carry especially high risk. Men in the middle years, in particular, will need to be a principal target" of suicide prevention efforts (Caine, 2003). Until recently, members of this population "have received the least attention from many of those who are committed to developing methods of prevention and clinical intervention" (Id.).

The Canadian Centre for Suicide Prevention (2007) conducted a literature review examining risk factors that contribute to suicide behaviors in men. The four key factors identified were (1)

western cultural attitudes that view male suicide death more favorably than attempts at suicide; (2) alcohol and substance abuse leading to impulsivity and reduced inhibition; (3) choice and availability of lethal means; and (4) reluctance to seek help for problems. In a more recent, comprehensive review of literature related to suicide risk for men, Coleman, Kaplan, and Casey (2011) identified the following additional circumstances and factors that contribute to elevated suicide risk for men:

- Single, separated, or recently divorced
- Unemployed or below-average income
- Mental illness (including depression)
- Veteran status
- Sudden unexpected loss of job, home, or relationship

These risk factors represent a cumulative effect and are not individually causal. Some factors such as mental illness and depression are critical factors, whereas the loss of job or relationship would be considered more catalytic. Additional factors shown to impact suicidal ideation of men are changing social roles and cultural cues around masculinity, difficulty in managing perceived expectations, and stigma around reaching out for help for depression and other mental health issues It is further theorized that men die by suicide in greater numbers than women in part because of an amplification of a male gender role that emphasizes strength, stresses the importance of financially providing for others, and accepts behaviors associated with anger and violence. The greater reluctance of men to seek help for mental health when needed also increases their risk of suicide relative to women (Möller-Leimkühler, 2003). Instead of seeking help, men often obscure their depression by responding with male normative behaviors such as aggressiveness, acting out, alcohol abuse, and low impulse control (Id.).

While it is axiomatic that suicide risk is closely associated with mental health problems and substance abuse, a recent study of suicide deaths in 16 U.S. states concluded that 62% of males who completed suicide had no mental health history and 84% were first-time attempters (Kaplan, 2011). One suggested conclusion from this study was that two of the highest suicide predictors simply were not present in a majority of male suicides, and therefore this group fell outside of the population upon which much of the collective knowledge about suicidality is premised. Another possibility is that men suffering from depression or other behavioral disorder are not being accurately diagnosed – either because they are not seeking help or they are not being properly assessed. Either explanation is troubling, and both support the need to adopt those recommendations set forth in this report to improve early detection and intervention competencies by persons outside the behavioral health system.

Manifestly, the issues surrounding male suicide are complex and challenging. As a starting point in dealing with this problem, the Wyoming Department of Health recently commissioned a study involving personal interviews with middle-aged Wyoming men who were suicide-attempt survivors and with family members of Wyoming men who completed suicide (Anastasia, 2012). Although the sample size was relatively small, these interviews revealed some important common themes. First, although suicide attempts by middle-aged Wyoming men frequently were precipitated by one or more stressful life events (e.g., divorce or unemployment), these men had been suffering severe and constant mental pain for months and years before they attempted,

often as a result of childhood trauma. This finding is consistent with more general research and suggests the possibility of upstream interventions that encourage men to seek help before their condition devolves into suicidality. Second, contrary to the preconception that most Wyoming men will not seek out mental health treatment because of cultural norms and stigma, the men interviewed as part of this study had sought out some form of counseling prior to their suicide attempt, but it proved ineffective in realizing lasting positive outcomes. This finding highlights the importance of improving the effectiveness of mental health providers and primary care practitioners in assessing suicide risk and managing the treatment of at-risk individuals.

Other than the workplace, there is a distinct lack of societal institutions within which most at-risk adult men can be reached. Accordingly, effective suicide prevention messaging for men is a strategy of increasing interest across the country. The research suggests that a campaign with a goal of reducing suicide among middle-aged men in Wyoming should be directed at two specific audiences; men at risk for suicide ideation, and their supportive others. While those at risk are the most essential to reach, shifting the stigma around help-seeking and changing the culture around masculinities should be a long-term goal. By directing messaging toward individuals with potential to intervene to save the lives of the men at risk for suicide, campaigns can also demonstrate immediate impact which can be measured by increases in referrals to support services. This multi-modal approach is also in-line with recommendations by the American Association of Suicidology, which emphasizes suicide interventions should include families and friends as partners in suicide prevention efforts, "supportive others" as a second line of defense. The goal of both messaging approaches is to reduce and overcome barriers to seeking or providing help. For suicidal men the barrier is the stigma against seeking help for emotional issues (Möller-Leimkühler, 2003).

There are limited examples of messaging campaigns designed to reduce suicide among middle-aged men. Coleman, Kaplan, and Casey (2011) suggest suicide prevention efforts use a messaging strategy which capitalizes on positive traditional masculine attributes. They highlight a recent U.S. Veteran's Administration campaign addressing the broader topic of mental illness. Central to this campaign was the slogan, "It takes the courage and strength of a warrior to ask for help." This message attempts to overcome resistance to help-seeking by appealing to an image of control and strength. A similar messaging strategy has been employed in Wyoming where perceptions about masculinity are characterized by an iconic cowboy culture focused on toughness and self-reliance. When applied to mental illness, a "cowboy-up" attitude could have deadly consequences. In an attempt to reframe the cowboy-up message slogan, the University of Wyoming Counseling Center capitalized on the cowboy-up theme in messaging campaigns designed to encourage those with mental health issues to seek help. For example a poster depicting a mounted cowboy in the background was accompanied by the message, "It takes strength to ask for help," (Anastasia, 2012).

In June 2012, the Colorado Department of Public Health and Environment and the Carson J Spencer Foundation launched a multimedia project called "Man Therapy" that deals with men's mental health issues, including suicidal thoughts and feelings (Draper, 2012). This project relies heavily on humor to cut through stigma and confront serious issues such as divorce and depression. The Man Therapy campaign includes a website, public service ads, videos, social media promotions, posters and other messages. The centerpiece of the initiative is a website located at www.mantherapy.org, where men and the people who love them can make a virtual

appointment with a main character, Dr. Rich Mahogany. In developing this campaign, the sponsors conducted focus groups and in-depth interviews with previously suicidal men between the ages of 30 and 54. The men interviewed provided insight as to what helped them get through their suicidal crises. These included their intimate partners, treatment, spirituality and thinking about their family (especially children). Other key findings include the use of radio and going to where the men are (e.g., workplace, bars), as well as employing such messaging as:

- "Can't move a couch by yourself, can't jump a car by yourself – sometimes you just need a hand to get over the big bumps in life"
- "I was stronger when I went to get help than when I didn't"
- "Need to be there for your kids"

As a result of this research, the developers of the Man Therapy project determined that the keys to a successful media campaign for men are (1) meet men where they are at; (2) use traditional gender role values and language; (3) develop a unique strategy that emphasizes spirituality and positive thinking, social networks, non-mental health language, and nontraditional mastery-originated services; and (4) look at established models with a track record of success such as the United States Air Force Suicide Prevention Program (Spencer-Thomas, 2010). While existing media campaigns not specifically developed for Wyoming men may have a limited reach, they should be utilized wherever appropriate.

- ***<u>Recommendation</u>: Wyoming should leverage existing public health awareness campaigns and web-based resources for men at risk for depression and suicide by such identifying resources and distributing information throughout its state and community networks.***

Creating messages directed toward suicidal Wyoming men as well as those who may provide support for those men presents challenges. Messages directed at troubled middle-aged men will need to be positive and should be tailored to overcome resistance to help-seeking. Messages directed toward those who are in a position to help the troubled men (e.g. family, friends, coworkers, healthcare providers) should be designed to overcome social stigma regarding interfering in people's lives and should supply language for supportive others to use in their efforts. The problem of high levels of suicide among middle-aged men in Wyoming will not be easy to mitigate and there are many dimensions to seeking a solution. The first step is to encourage men at-risk of suicide to seek help. Treatment and continuing care can only occur if the individual in need of help takes that initial step. Because of the importance of this initial contact, the role of a successful messaging campaign cannot be emphasized enough.

Additionally, any social awareness campaign in Wyoming that includes a message around reducing access to firearms has the potential to substantially reduce suicide risk but is also likely to encounter resistance related to cultural norms. The messaging challenge is to convince those close to the man at risk of suicide to intercede to remove firearms from his home. These actions confront not only inhibitions against violating a person's privacy but also cut perilously close to Second Amendment concerns. Messages tailored toward securing firearms would have to be carefully nuanced to ensure second amendment rights. At the same time, messages must be persuasive enough to convince healthcare providers, friends, and family to reach across the privacy divide.

Other potential gatekeepers and community partners might also be targeted for information and training. With particular focus on the depressed male who has developed a drinking problem, thus is at increased risk for suicide, bartenders could be targeted to be trained gate-keepers (Brooks, 1976). Similarly, divorce and bankruptcy attorneys might be appropriate gatekeepers to mental health services if sufficiently trained. Lastly, it is imperative to develop pathways of help-seeking and receiving that do not challenge a man's need to maintain an image of functional performance. Innovative interventions designed to reach men on the job, e.g., e-mail systems of cognitive-based treatments (e.g., Langdon, 2002), or increased weekend service availability models might be considered and pilot tested.

Because the highest numbers of suicide deaths in Wyoming occur in men between ages 20-30 and ages 35-60, and because experience suggests this population may be strongly influenced by fear of stigma, the state's limited media and outreach resources should at this time be directed to influencing the behaviors of young adult males and middle-age males. The efficacy of this focused approach has been specifically endorsed by the Suicide Prevention Resource Center, which recommends targeting media campaigns to middle-aged white men because this age group (35-64) accounts for the largest number of suicide deaths and its members often are at heightened risk because of inappropriate alcohol use, adverse life events (e.g., divorce and unemployment) and frequently have easy access to firearms (Summary of Research Findings and Recommendations, 2010).

- ***Recommendation: A statewide media campaign should be implemented to reduce stigma and encourage Wyoming men between ages 20-60 to seek help for depression and suicidal thoughts; because this span of years encompasses both young adult males and middle-age males, the need to develop multiple messages should be considered.***

VIII. Summary of Recommendations

Research strongly suggests that the most effective way to reduce suicide rates is through a comprehensive and multi-tiered approach that includes the following strategies designed to produce systems-level change: (1) restricting access to lethal means by high-risk individuals, (2) improving education and training of primary care providers and mental health practitioners, and (3) widespread public education and outreach about suicide prevention and early intervention. In addition, evidence-based strategies and best practices should be employed to mitigate risk factors, promote resiliency and other protective factors and, ultimately, reduce suicidal behaviors. Finally, media and public outreach should be strategically employed to reduce stigma and to positively influence attitudes, knowledge and behaviors.

On August 31, 2012, the Wyoming Suicide Prevention Advisory Council met to review and comment on the recommendations set forth in this report. Some 30 members of the WySPAC present at that meeting voted for the recommendations they believed should be given priority consideration. In order of priority the top seven recommendations of the WySPAC are:

PRIORITY RECOMMENDATIONS

1. **The Governor should establish a Wyoming Firearm Safety Coalition for the purpose of adopting best practices and tools for gun shop owners and others on how to avoid selling firearms to suicidal persons and how to educate customers about methods to protect persons at high-risk of suicide from self-harm with firearms (19 votes).**
2. **The Wyoming Board of Medicine Wyoming Medical Society, Wyoming Association of Osteopathic Physicians and Surgeons, Wyoming Association of Psychiatric Physicians, Wyoming Association of Physicians Assistants, Wyoming Primary Care Association, Wyoming Hospital Association and other stakeholders in the medical community should collaboratively develop educational competencies and training tools for physicians and physician assistants for the diagnosis and management of depression, routine screening of clients for mental health issues and suicide, and suicide intervention (18 votes).**
3. **The Board of Coroners Standards should develop and implement uniform standards for the investigation of cases of apparent or suspected suicide and for collecting and reporting of suicide death data (16 votes).**
4. **The Wyoming Hospital Association, Wyoming Medical Society, Wyoming Emergency Nurses Association, Wyoming Trauma Coordinators, Wyoming Office of Emergency Services and other stakeholders in the emergency medical services community should collaborate to create and implement uniform guidelines for emergency room treatment, discharge and post-discharge follow-up for suicidal patients (15 votes).**
5. **State licensing boards should require suicide-specific continuing education as a requirement for the renewal of every mental health professional's license (14 votes).**
6. **A statewide media campaign should be implemented to reduce stigma and encourage Wyoming men between ages 20-60 to seek help for depression and suicidal thoughts; because this span of years encompasses both young adult males and middle-age males, the need to develop multiple messages should be considered (14 votes).**
7. **The Wyoming Departments of Family Services, Health, Workforce Services and such other state agencies as may provide services to at-risk individuals should develop and implement mandatory staff training on suicide risk recognition and response for all personnel who have direct contact with individuals at risk for suicide and their families (12 votes).**

The following is a listing of the remaining recommendation from this report, in no particular order of prioritization:

- *The Wyoming Hospital Association should facilitate the development of processes, protocols and reporting forms to collect and report suicide attempt data and coordinate with the Wyoming Department of Health with respect to the utilization and sharing of such data for planning purposes in compliance with the Health Insurance Portability and Accountability Act (HIPAA) and other applicable state and federal laws and regulations.*
- *The Wyoming Department of Health should pilot test a countywide psychological autopsy project beginning January 1, 2013 and ending December 31, 2013, and prepare a final report describing the results of that project to determine the efficacy of expanding it in other counties.*
- *The State Suicide Prevention Program, including the Suicide Prevention Team Leader, Regional Suicide Prevention Coordinators, and the Wyoming Suicide Prevention Advisory Council, should update the State Suicide Prevention Plan and create regional strategic plans for suicide prevention no later than January 1, 2013, in a manner consistent with the recommendations set forth in this report.*
- *The Wyoming Department of Health, in collaboration with other Executive Branch agencies, boards and commission, should develop a comprehensive plan for providing "gatekeeper" suicide risk alertness trainings to members of public, private-sector and faith-based organizations across Wyoming with a goal of training one-tenth of the population by 2015.*
- *Suicide prevention efforts in Wyoming communities should utilize scientifically validated evidence-based programs and best practices as part of a comprehensive public health approach to reducing suicidal behaviors.*
- *The Brief Intensive Treatment for Suicidal Individuals and Their Support Systems (BIT-SITSS) should develop training manuals and operational guidelines for potential replication of BIT-SITSS as an evidence-based program. Data on programmatic outcomes and cost savings should continue to be collected and analyzed, and if warranted by such data and research, funding to replicate BIT-SITSS in other Wyoming communities should be secured.*
- *Mental health providers and primary care and public health practitioners should be trained in early detection and intervention for alcohol problems through the Screening, Brief Intervention, and Referral for Treatment (SBIRT) model or other evidence-based alcohol intervention protocols.*
- *Appropriate protocols should be established to ensure that individuals lacking appropriate graduate/professional training and supervised experience are not entrusted with the assessment and management of suicidal persons in an inpatient environment.*

- *The University of Wyoming and Wyoming's community colleges should incorporate appropriate educational components that include state-of-the-science suicide prevention risk assessment, depression management and treatment for suicidal ideation in their undergraduate and graduate-level psychology, social work and other behavioral health-related degree programs.*
- *The Wyoming Suicide Prevention Program should sponsor at least one annual AMSR training in the state; the Wyoming Department of Health will work with the Wyoming Association of Mental Health and Substance Abuse and Centers and the Mental Health Planning Council to promote and encourage attendance by its constituent providers.*
- *The Wyoming State Board of Nursing and Wyoming Nurses Association should develop minimum core competencies in suicide risk assessment and management and continuing education requirements in suicide prevention for registered professional nurses, licensed practical nurses, and certified nursing assistants.*
- *The Wyoming Suicide Prevention Program should collaborate with the Wyoming Primary Care Association, the Wyoming Medical Society and other state and community organizations to distribute the Suicide Prevention Resource Center's Suicide Prevention Toolkit for Rural Primary Care to all primary care practices and clinics in Wyoming and to provide technical assistance to primary care staff on implementing and operationalizing the strategies set forth in the toolkit.*
- *Boards and organizations supervising the credentialing of Wyoming medical providers and mental health practitioners should develop a mandatory continuing education requirement for counseling at-risk clients and families about access to lethal means, such as the Counseling Access to Lethal Means online course developed by the Harvard School of Public Health in partnership with the Suicide Prevention Resource Center.*
- *The Governor should appoint a special task force of public-sector executives and industry and business leaders to develop and implement suicide prevention education and outreach resources for Wyoming's employers.*
- *The Departments of Health and Education should collaborate to provide a series of community LGBT workshops on cultural competencies and suicide prevention for school staff and youth services providers.*
- *The Governor and Superintendent of Education should appoint a special task force on bullying and suicide prevention to develop a state action plan for Wyoming public schools and communities.*
- *The Departments of Education and Health should work directly with public school districts and individual schools to implement the Good Behavior Game in Wyoming's public elementary schools.*
- *The Departments of Education and Health should work directly with public school districts and individual schools to implement the Sources of Strength program or other strengths-based peer mentoring programs in Wyoming to increase student resiliency and coping skills and promote help-seeking behaviors by students in crisis.*

- *The Departments of Education and Health should encourage and assist public school districts and individual schools in implementing the Positive Parenting Program and other evidence-based programs to increase parental competencies in the mental health of their children in Wyoming's public schools.*
- *The Governor should appear in a Public Service Announcement appealing to parents to learn the warning signs of suicidal behaviors in their children.*
- *The Wyoming Departments of Education, Family Services and Health should develop and distribute to parents educational materials on suicide risk recognition and resources, including brochures and a web-based training for parents to be housed on one or more state-owned websites.*
- *Wyoming should leverage existing public health awareness campaigns and web-based resources for men at risk for depression and suicide by such identifying resources and distributing information throughout its state and community networks.*
- *The Governor and other leading Wyoming public figures should develop a series of Public Service Announcements designed to (1) identify suicide as a public health priority in Wyoming; (2) to expose and correct misperceptions about mental illness and suicide, particularly with respect to men; and (3) to encourage individuals to seek help for themselves if they are in crisis or for family members and friends who may be in crisis.*
- *The Governor should request the Joint Labor, Health and Social Services Committee convene an interim study to consider legislation to improve suicide prevention, early intervention and treatment outcomes.*
- *The Governor should direct that quarterly meetings between the Governor's Office and executive leadership be held to review implementation of these action steps and other state suicide prevention efforts.*

IX. Conclusion

This report is intended to provide a range of strategic initiatives based on the best available scientific research and knowledge of the field. The recommendations made are not exhaustive, but collectively they provide a solid foundation for a comprehensive public health approach to reducing the problem of suicide in Wyoming. Some of these recommendations will be easier to implement with fidelity than others; some will require considerable political will. Substantial coordination of efforts across agencies will be required. While these recommendations are intended to leverage existing resources and capacity, additional funding will be needed in the future to accomplish certain objectives.

The public health initiative described by this report necessarily will require important governmental policy decisions and improvements to multiple systems. Certain aspects involve fundamental questions of individual freedom and institutional authority, and should be informed by a larger public debate. The executive-level leadership required to implement the recommendations in this report is admittedly significant, but once initiated it will place Wyoming at the forefront of the nation in terms of its commitment to reducing the burden suicide among its residents.

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Appendix I: Wyoming Suicide Deaths (2002-2011)[4]

Wyoming Suicide Death Numbers and Rates (2002-2011)		
0-19	Number	76
	*Rate per 100,000	4.93
20-24	Number	103
	Rate per 100,000	25.82
25-29	Number	98
	Rate per 100,000	27.60
30-34	Number	81
	Rate per 100,000	24.99
35-39	Number	85
	Rate per 100,000	26.30
40-44	Number	102
	Rate per 100,000	29.08
45-49	Number	119
	Rate per 100,000	28.74
50-54	Number	107
	Rate per 100,000	25.54
55-59	Number	84
	Rate per 100,000	22.80
60-64	Number	51
	Rate per 100,000	18.31
65-69	Number	35
	Rate per 100,000	17.54
70-74	Number	40
	Rate per 100,000	23.62
75-79	Number	38
	Rate per 100,000	30.99
80-84	Number	41
	Rate per 100,000	45.68
85+	Number	29
	Rate per 100,000	37.30
Total	Number	1089
	Rate per 100,000	20.43

Wyoming Suicide Death Numbers 7 Highest Age Categories	
Age	Deaths
45-49	119
50-54	107
40-44	102
20-24	103
25-29	98
35-39	85
55-59	84

Wyoming Suicide Death Rates 7 Highest Age Categories	
Age	Rates
80-84	45.68
85+	37.30
75-79	30.99
40-44	29.08
45-49	28.74
25-29	27.60
35-39	26.30

[4] Source: Vital Statistic Services, Wyoming Department of Health, July 2012. Rates are not adjusted for age.

Appendix II. Risk Factors Among Wyoming's High School Seniors

Category	2010
Lifetime alcohol use	73%
Alcohol use during past 30 days	44%
Marijuana use during past 30 days	16%
Cigarette use during past 30 days	23%
Misuse of prescription drugs during past 30 days	6%
Binge drinking during past 2 weeks	29%
Suspended from school in past 12 months	6%
Came to school drunk of high in past 12 months	10%
Arrested during past 12 months	6%
Community disorganization	31%
Perceived availability of drugs	37%
Poor family management	30%
Parents favorable attitudes toward drug use	58%
Low commitment to school	37%
Rebelliousness	29%
Early initiation of antisocial behavior	33%
Early initiation of drug use	31%
Favorable attitude toward antisocial behavior	41%
Favorable attitude toward drug use	34%
Intent to use drugs as an adult	31%
Perceived risk and harm of drug use	51%
Interactions with antisocial peers	45%
Friends' use of drugs	32%
Sensation seeking	46%
Rewards for antisocial behavior	49%
Symptoms of depression	27%
Moved between schools in last year (other than normal grade transitions)	10%
Felt unsafe at school or felt unsafe going to or from school	15%
Attended community event where large amounts of alcohol were available	74%

Source: Wyoming Survey & Analysis Center, Prevention Needs Assessment

Category	2011
Skipped school in last 30 days because felt unsafe	6.1%
Threatened with weapon in last year	7.3%
In a fight during last year	26.5%
Ever abused by boyfriend or girlfriend	14.2%
Ever raped	12.2%
Bullied on school property in last month	25.0%
Were obese	11.1%
Inadequate diet	88.5%
Carried a gun during last 30 days	10.8%

Source: Wyoming Department of Education, Youth Risk Behavioral Survey

Appendix III: SAMHSA's National Registry of Evidence-Based Programs and Practices

Adolescent Coping With Depression (CWD-A)	The Adolescent Coping With Depression (CWD-A) course is a cognitive behavioral group intervention that targets specific problems typically experienced by depressed adolescents. These problems include discomfort and anxiety, irrational/negative thoughts, poor social skills, and limited experiences of pleasant activities.
American Indian Life Skills Development	School-based suicide prevention curriculum targeting Native American youth age 14-19.
CARE (Care, Assess, Respond, Empower)	High school-based suicide prevention program targeting high-risk youth.
CAST (Coping And Support Training)	High school-based suicide prevention program targeting youth 14 to 19 years old. CAST delivers life-skills training and social support in a small-group format (6-8 students per group).
Cognitive Behavioral Therapy for Late-Life Depression	Cognitive Behavioral Therapy (CBT) for Late-Life Depression is an active, directive, time-limited, and structured problem-solving approach program that follows the conceptual model and treatment program developed by Aaron Beck and his colleagues.
Dialectical Behavior Therapy	DBT is a cognitive-behavioral treatment approach with two key characteristics: a behavioral, problem-solving focus blended with acceptance-based strategies, and an emphasis on dialectical processes.
Dynamic Deconstructive Psychotherapy	DDP is a 12- to 18-month, manual-driven treatment for adults with borderline personality disorder and other complex behavior problems, such as alcohol or drug dependence, self-harm, eating disorders, and recurrent suicide attempts.
Emergency Department Means Restriction Education	Intervention for the adult caregivers of youth (aged 6 to 19 years) who are seen in an emergency department (ED) and determined through a mental health assessment to be at risk for committing suicide.
Emergency Room Intervention for Adolescent Females	Program for teenage girls 12 to 18 years old who are admitted to the emergency room after attempting suicide. The intervention, which involves the girl and one or more family members who accompany her to the emergency room, aims to increase attendance in outpatient treatment following discharge from the emergency room and to reduce future suicide attempts.
Interpersonal Psychotherapy for Depressed Adolescents (IPT-A)	Short-term, manual-driven outpatient treatment intervention that focuses on the current interpersonal problems of adolescents (aged 12-18 years) with mild to moderate depression severity.
Lifelines Curriculum	Comprehensive school-wide suicide prevention program for middle and high school students. The goal of Lifelines is to promote a caring, competent school community in which help seeking is encouraged and modeled and suicidal behavior is recognized as an issue that cannot be kept secret.
Model Adolescent Suicide Prevention Program (MASPP)	The Model Adolescent Suicide Prevention Program (MASPP) is a public health-oriented suicidal-behavior prevention and intervention program originally developed for a small American Indian tribe in rural New Mexico to target high rates of suicide among its adolescents and young adults.
Multisystemic Therapy With Psychiatric Supports (MST-Psychiatric)	Designed to treat youth who are at risk for out-of-home placement (in some cases, psychiatric hospitalization) due to serious behavioral problems and co-occurring mental health symptoms such as thought disorder, bipolar affective disorder, depression, anxiety, and impulsivity.

Peer Assistance and Leadership (PAL)	Peer helping program that seeks to build resiliency in youth by pairing youth with peer helpers who receive training and support from teachers participating in the program.
PROSPECT (Prevention of Suicide in Primary Care Elderly: Collaborative Trial)	Aims to prevent suicide among older primary care patients by reducing suicidal ideation and depression. The intervention components are: (1) recognition of depression and suicide ideation by primary care physicians, (2) application of a treatment algorithm for geriatric depression in the primary care setting, and (3) treatment management by health specialists (e.g., nurses, social workers, and psychologists).
Reconnecting Youth: A Peer Group Approach to Building Life Skills	School-based prevention program for students ages 14-19 years that teaches skills to build resiliency against risk factors and control early signs of substance abuse and emotional distress.
Seeking Safety	Seeking Safety is a present-focused treatment for clients with a history of trauma and substance abuse. The treatment was designed for flexible use: group or individual format, male and female clients, and a variety of settings (e.g., outpatient, inpatient, residential).
SOS Signs of Suicide	SOS Signs of Suicide is a 2-day secondary school-based intervention that includes screening and education. Students are screened for depression and suicide risk and referred for professional help as indicated.
Sources of Strength	Universal suicide prevention program designed to build socio-ecological protective influences among youth to reduce the likelihood that vulnerable high school students will become suicidal.
TeenScreen	Identifies middle school- and high school-aged youth in need of mental health services due to risk for suicide and undetected mental illness. The program's main objective is to assist in the early identification of problems that might not otherwise come to the attention of professionals.
Trauma Focused Coping (Multimodality Trauma Treatment)	Also called Multimodality Trauma Treatment, this is a school-based group intervention for children and adolescents in grades 4-12 who have been exposed to a traumatic stressor (e.g., disaster, violence, murder, suicide, fire, accident).
United States Air Force Suicide Prevention Program	Population-oriented approach to reducing the risk of suicide. The Air Force has implemented 11 initiatives aimed at strengthening social support, promoting development of social skills, and changing policies and norms to encourage effective help-seeking behaviors.

Source: Substance Abuse and Mental Health Services Administration, SAMHA's National Registry of Evidence-based Programs and Practices, http://www.nrepp.samhsa.gov/

Appendix IV: Best Practices in Suicide Prevention

SETTING	NAME	TYPE	TARGET AUDIENCE
Emergency Rooms (3)	Is Your Patient Suicidal?	Awareness	ED Staff
	After an Attempt	Awareness	Families of Attempters
	At-Risk in the ED	Education/Training	ED Staff
Public Schools (17)	After a Suicide-Toolkit	Guidelines	Middle/HS Students
	Ask 4 Help	Education/Training	HS Students
	At-Risk for High School Educators	Education/Training	HS Teachers
	Gryphon Place Gatekeeper Programs	Education/Training	Middle/HS Students
	Helping Every Living Person	Education/Training	Students
	How Not to Keep a Secret	Peer-Based	HS Students
	LEADS for Youth	Education/Training	HS Students
	Lifelines Intervention	Education/Training	Middle/HS Students
	Lifelines Postvention	Education/Training	Middle/HS Students
	LifeSavers Training	Education/Training	HS Students
	Look Listen Link	Education/Training	Middle/HS Students
	Making Educators Partners	Education/Training	School Teachers/Staff
	More than Sad	Education/Training	School Teachers/Staff
	Response: Comprehensive HS Program	Education/Training	Teachers/Students/Parents
	School Suicide Prevention Accreditation Pgm.	Education/Training	School Staff
	SOS Middle School Program	Education/Training	Middle School Students
	Teens for Life	Education/Training	HS Students
Higher Education (7)	At-Risk for University and College Students	Education/Training	College Students
	At-Risk for University and College Faculty	Education/Training	College Teachers
	Campus Connect Gatekeeper Training	Education/Training	College Staff/Students
	Interactive Screening Program	Screening	College Students
	Student Support Network	Peer-Based	College Students
	Suicide Prevention Multicultural Competency	Education/Training	College Counselors
	DORA College Program	Education/Training	Peer Groups
Community (5)	Connect: Suicide Postvention Program	Education/Training	General
	Applied Suicide Intervention Skills Training	Education/Training	General
	Be A Link Gatekeeper Training	Education/Training	General
	Question, Persuade, Refer (QPR)	Education/Training	General
	SafeTALK	Education/Training	General
Workplace	Working Minds: Suicide Prevention at Work	Education/Training	Administrators/Employees
Law Enforcement (2)	In Harm's Way	Education/Training	LE/Corrections Staff
	QPR for Law Enforcement	Education/Training	LE/Corrections Staff
Primary Care (2)	Recognizing and Responding to Suicide Risk	Education/Training	Primary Care Physicians
	Rural Primary Care Provider Toolkit	Education/Training	PC Doctors and Staff
Military (4)	Army ACE Suicide Intervention Program	Education/Training	Soldiers
	Family of Heroes	Education/Training	Family members of veterans
	Operation Save	Education/Training	Veterans
	Safety Plan Treatment Manual	Education/Training	Veterans
Mental Health (4)	Counseling Access to Lethal Means	Education/Training	MH Providers
	Late Life Suicide Prevention Toolkit	Education/Training	MH Providers & Clinicians
	QPRT Suicide Risk Assessment & Mgmt.	Education/Training	MH Providers & Clinicians
	Recognizing and Responding to Suicide Risk	Education/Training	Clinicians
Multiple (8)	Survivor Voices	Education/Training	Survivors
	Coping with the Loss	Awareness	Survivors
	Supporting Survivors	Awareness	Funeral Directors
	EndingSuicide.com	Education/Training	MH Providers; Doctors; Teachers
	Let's Talk Gatekeeper Training	Education/Training	Foster Parents and Caregivers
	Not My Kid	Awareness	Parents
	Parents as Partners	Awareness	Parents
	Helping Families with LGBT Children	Awareness	Families

Source: Suicide Prevention Resource Center, Best Practices Registry, http://www.sprc.org/bpr

Appendix V: History of Suicide Prevention in Wyoming

1998 Reno Conference

1999 Surgeon General's Call to Action to Prevent Suicide

2005 National Strategy For Suicide Prevention

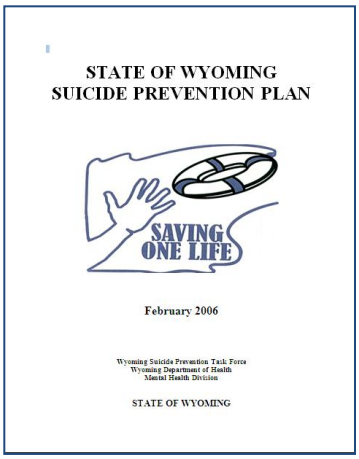
2004 Congress Passes Garrett Lee Smith Memorial Act

August 2006 Wyoming Awarded GLSMA Youth Suicide Prevention Grant (Cohort II Grantee)

August 2009 Wyoming Awarded GLSMA Youth Suicide Prevention Grant (Cohort V Grantee)

Late 1990s State of Wyoming Suicide Prevention Task Force Forms

Early 2000s Wyoming State Task Force & Mental Health Division Draft State Suicide Prevention Plan


STATE OF WYOMING
SUICIDE PREVENTION PLAN

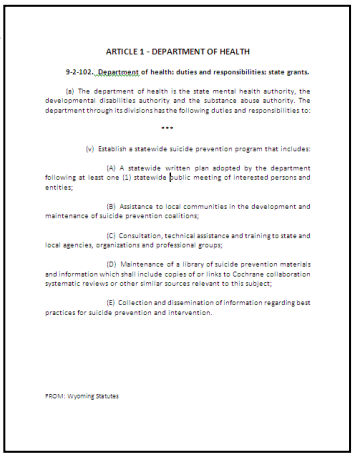
SAVING ONE LIFE

February 2006

Wyoming Suicide Prevention Task Force
Wyoming Department of Health
Mental Health Division

STATE OF WYOMING

2005 Wyoming Legislature Passes Suicide Prevention Legislation W.S. § 9-2-102(a) (v)


ARTICLE 1 - DEPARTMENT OF HEALTH

9-2-102. Department of health; duties and responsibilities; state grants.

(a) The department of health is the state mental health authority, the developmental disabilities authority and the substance abuse authority. The department through its divisions has the following duties and responsibilities to:

...

(v) Establish a statewide suicide prevention program that includes:

(A) A statewide written plan adopted by the department following at least one (1) statewide public meeting of interested persons and entities;

(B) Assistance to local communities in the development and maintenance of suicide prevention coalitions;

(C) Consultation, technical assistance and training to state and local agencies, organizations and professional groups;

(D) Maintenance of a library of suicide prevention materials and information which shall include copies of or links to Cochrane collaboration systematic reviews or other similar sources relevant to this subject;

(E) Collection and dissemination of information regarding best practices for suicide prevention and intervention.

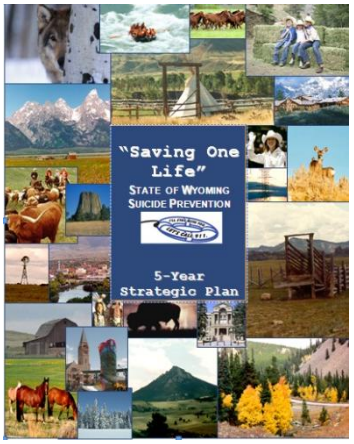
FROM: Wyoming Statutes

July 2005 – State Suicide Prevention Program Begins in MHD

August 2006 First Strategic Planning Retreat of State Task Force

October 2006 Wyoming Youth Suicide Prevention Initiative Begins & WYSPAC Formed

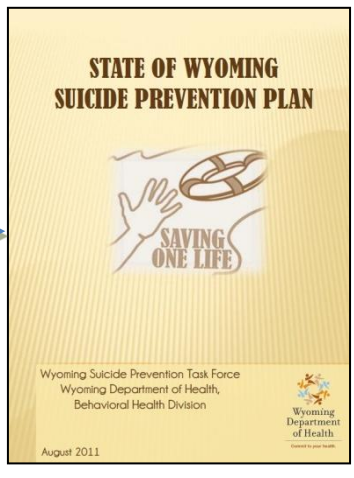
2007 5-Year Strategic Plan



2009 State Task Force & WYSPAC Merged into WySPAC

October 2009 Wyoming Youth Suicide Prevention Initiative Cohort V Begins

August 2011 – State Plan Revised


STATE OF WYOMING
SUICIDE PREVENTION PLAN

SAVING ONE LIFE

Wyoming Suicide Prevention Task Force
Wyoming Department of Health,
Behavioral Health Division

August 2011

Wyoming Department of Health

July 2012 Suicide Prevention Becomes Part of PMO – 4 Regional Specialists Hired

Appendix VI: 2008 Wyoming Stigma Survey

	All Adults	Adults without Children	Adults with Children	Young Adults (18-25)	Minors (16-17)
"Receiving treatment for suicidal thoughts and behaviors carries social stigma"					
Strongly Agree	11.0%	12.8%	9.0%	10.5%	7.0%
Agree	54.8%	54.3%	55.9%	57.0%	74.4%
Don't agree or disagree	8.5%	8.9%	8.2%	14.9%	9.3%
Disagree	22.9%	21.3%	24.2%	14.9%	9.3%
Strongly Disagree	2.8%	2.8%	2.7%	2.6%	0.0%
People will see a person in a less favorable way if they know that he or she received treatment for suicidal thoughts and behaviors					
Strongly Agree	4.1%	4.7%	3.6%	4.4%	0.0%
Agree	40.3%	42.4%	38.3%	31.0%	34.1%
Don't agree or disagree	10.8%	9.7%	11.7%	15.0%	6.8%
Disagree	36.9%	35.3%	38.6%	32.7%	45.5%
Strongly Disagree	7.9%	8.0%	7.7%	16.8%	13.6%
Are you aware of at least one crisis hotline number you could give to a friend at risk for suicide?					
Yes	51.2%	52.4%	49.9%	52.1%	53.8%
No	48.8%	47.6%	50.1%	47.9%	46.2%
How much knowledge do you have to talk to someone about suicide if you think they are at risk ?					
A great deal of knowledge	13.3%	13.2%	13.3%	20.2%	35.6%
Some knowledge	56.9%	56.5%	57.5%	59.6%	46.7%
No knowledge	29.8%	30.2%	29.2%	20.2%	17.8%
"If someone takes their life, their situation was probably so bad that death was the best solution"					
True	10.3%	13.5%	7.3%	9.4%	
False	87.2%	83.2%	91.1%	88.7%	
"Reducing access to firearms reduces the risk of suicide"					
True	21.1%	22.3%	19.9%	26.4%	28.9%
False	77.0%	75.7%	78.2%	71.7%	71.1%
"Most people who talk about or threaten suicide don't do it"					
True	41.2%	40.7%	41.6%	52.8%	44.4%
False	48.7%	49.0%	48.6%	43.4%	55.6%
"If someone has experienced the suicide of a family member or a friend, this increases the risk that THEY will attempt suicide"					
True	37.2%	36.5%	38.2%	66.0%	
False	53.7%	53.3%	53.9%	32.1%	
"People who really want to die will find a way; it won't help to try to stop them"					
True	27.1%	29.5%	24.8%	32.1%	15.6%
False	69.5%	67.5%	71.4%	67.9%	82.2%
"One should not talk to depressed people about suicide; it might give them the idea or plant the seed"					
True	13.8%	15.8%	11.7%	22.6%	22.2%
False	82.1%	78.3%	85.8%	77.4%	77.8%

Appendix VII: List of Priority Strategic Objectives and State of Wyoming Suicide Prevention Plan (August 2011)

LIST OR PRIORITY STRATEGIC OBJECTIVES	
GOAL 1: PROMOTE AWARENESS THAT SUICIDE IS A PUBLIC HEALTH PROBLEM THAT IS PREVENTABLE	
Objective 1.1	Provide ongoing education and outreach to increase public knowledge of suicide as a public health epidemic, to enhance suicide prevention efforts, and to promote help-seeking behaviors, including holding regular state and local suicide prevention conferences.
Objective 1.2	Increase and enhance efforts to provide suicide prevention education via the internet
GOAL 2: DEVELOP BROAD-BASED SUPPORT FOR SUICIDE PREVENTION	
Objective 2.1	Increase financial support and political will for suicide prevention efforts by lawmakers, state and local policy makers, business leaders, and public and private foundations
Objective 2.2	Increase groups that integrate suicide prevention into their ongoing programs and activities, including state, county, and local officials, ~~,~~judges and court personnel, social services providers, law enforcement agencies, public and private employers, corrections systems, primary care providers and hospital staff, clergy and other members of the faith-based community, etc.
GOAL 3: DEVELOP AND IMPLEMENT STRATEGIES TO REDUCE THE STIGMA ASSOCIATED WITH BEING A CONSUMER OF MENTAL HEALTH, SUBSTANCE ABUSE, AND SUICIDE PREVENTION SERVICES.	
Objective 3.1	Increase the proportion of the public that views mental and physical health as equal and inseparable components of overall health.
Objective 3.2	Increase the proportion of the public that views mental disorders as illnesses that respond to specific treatments
Objective 3.3	Increase proportion of public that views MH/SA consumers as pursuing fundamental care for overall health
Objective 3.4	Increase the proportion of suicidal persons who receive appropriate treatment provided to those suicidal with underlying disorders
GOAL 4: DEVELOP AND IMPLEMENT COMMUNITY-BASED SUICIDE PREVENTION PROGRAMS AND ACTIVITIES	
Objective 4.1	Increase state and local capacity by recruiting broad range of stakeholders including faith-based leaders, coroners and medical examiners, youth, law enforcement staff, first responders, family members, and foster care parents
Objective 4.2	Increase the number of schools statewide that provide evidence-based programming as part of their curricula by targeting school boards and trustees.
---	Increase key services to suicide survivors, including providing comprehensive support programs and guidelines, and trainings for first responders, funeral directors, law enforcements and others who routinely interact with suicide survivors in the aftermath of a suicide
GOAL 5: PROMOTE EFFORTS TO REDUCE ACCESS TO LETHAL MEANS AND METHODS OF SELF-HARM	
Objective 5.1	Promote and encourage safe storage and disposal of medications and toxic substances. Promote and encourage safe storage of firearms and the use of trigger locks.
Objective 5.2	Develop guidelines and promote education for the safe dispensing of medications
GOAL 6: IMPLEMENT TRAINING FOR RECOGNITION OF AT-RISK BEHAVIOR AND DELIVERY OF EFFECTIVE TREATMENT	
Objective 6.3	Increase the number of professional groups such as law enforcement officers, dispatchers, correctional facility personnel, mental health and substance abuse professionals, psychologists, nurses, physicians and primary care practitioners, emergency medical technicians and other health related occupations, which require training on suicide risk assessment and recognition, suicide intervention, and aftercare as a prerequisite for certification/licensure.
GOAL 11: IMPROVE AND EXPAND SURVEILLANCE SYSTEMS	
Objective 11	Develop and refine standardized protocols for death scene investigations and implement these protocols in counties; improve the collection and reporting of suicides and suicide attempts by state and local authorities