Florida Suicide Prevention Strategy

2005-2010

Office of Drug Control
Executive Office of the Governor
State of Florida

STATE OF FLORIDA

Office of the Governor

THE CAPITOL

TALLAHASSEE, FLORIDA 32399-0001

JEB BUSH
GOVERNOR

January 2005

My fellow Floridians:

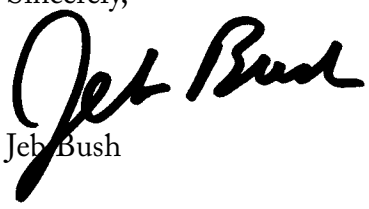
The devastation of suicide impacts families throughout our state and remains a serious problem. Each life lost effects countless families, friends and loved ones with unimaginable sorrow and pain. Florida has taken a significant step toward preventing this tragedy by initiating the *Florida Suicide Prevention Strategy* to reduce the incidence of suicide in our state by one third by the end of 2010.

The S*trategy* calls for an integrated and long-term approach to lowering the state's suicide rate by creating a partnership between government and citizen interest groups that can jointly collate and disseminate information in a timely manner, train and field qualified responders, and direct services to those at risk. Resources by themselves are not sufficient. To maximize positive outcomes, Florida will need an infrastructure that combines resources with organization and leadership.

While centralized structure is necessary to integrate the statewide effort, help procure federal assistance, and provide unified direction, success in suicide prevention depends on empowerment at the local level. Expansion of grassroots efforts interconnected by a network of shared information, mutual support, and reinforcing activities will serve as a first line of defense against suicide. Local control of solutions to the challenges posed by the threat of suicide is the best way to achieve overall success. To the extent that the state can nurture, interconnect, and support local coalitions, we shall do so.

Suicide is a complex social phenomenon. We have established achievable objectives that will decrease the suicide rate and save lives. We are resolved to reach our goals and submit this strategy as a means to that end.

Sincerely,



Jeb Bush

EXECUTIVE SUMMARY

Suicide is America's 11th leading cause of death, claiming the lives of over 30,000 Americans per year.[1] Of those deaths, 2,294 occurred within the state of Florida in 2003, at a rate of 13.4 per 100,000.[2] Compared to the 1,004 homicides that occurred in Florida in 2003, the suicide rate is over twice the homicide rate. In spite of this reality, homicide rates get wide public coverage and policy response, while suicide is often tragically overlooked as a private matter pertaining only to the family involved.

Florida ranks 13th in the nation for rates of suicides.[3] No part of our social structure is immune from it. Youth (ages 15-24) suicide rates have tripled since the 1950's, making it currently the third leading cause of death among young people.[4] Although the youth suicide rates are astonishing, in 2001, 67% of the suicides in Florida were among adults between the ages of 25 and 64. The number of suicides is highest among adults but the rate of suicides is highest among the elderly. Elderly adults have suicide rates that are six times higher than the national average.[5] Comprising only 12.6% of the U.S. population, the elderly account for nearly 18.1% of all suicides.[6] While incidences of suicide appear to be more prevalent in certain segments of the population, the understanding that it strikes without regard to locality, socio-economic status, ethnicity, religious preference, or age leads us to construct a strategy that is comprehensive, integrated, and multi-disciplinary in its scope and purpose.

In January 2000, Governor Jeb Bush, recognizing that suicide is a serious problem, met with grass roots suicide prevention activists. Following this meeting Governor Bush directed the Office of Drug Control to coordinate decreasing the incidence of suicide in Florida. A subsequent series of meetings with various state agencies and suicide prevention activist groups led to the creation of the Florida Task Force on Suicide Prevention. In September 2002, the task force developed a Policy Paper entitled Preventing Suicide in Florida, which was built upon national and worldwide efforts to confront the tragic and growing trend of suicide. A number of pilot programs to inform, educate, train, screen, treat, and organize against the risk of suicide took root throughout Florida.

As our knowledge of suicide prevention has increased so has the need for a more extensive strategy. The task force has expanded upon its original efforts and produced the *Florida Suicide Prevention Strategy*. This *Strategy* calls for an integrated and long-term approach to lowering the state's current suicide rate. It offers a comprehensive framework for what needs to be done in order to decrease suicide rate in the state. The *Florida Suicide Prevention Strategy* is designed to add depth and momentum to the efforts consolidated and recharged in the first few years of this century. It's purpose is to serve as both a guide and an action agenda for preventing suicide in Florida, to have a lasting impact in bringing suicide to the forefront as a public issue, and over time to save thousands of lives that would otherwise be taken by their own hands.

The *Strategy* has three basic goals:

1. To decrease the incidence of suicide in Florida by one third (from approximately 14.1 per 100,000 in 2001 to approximately 9.4 per 100,000 by the end of 2010)
2. To decrease the incidence of teen suicide in Florida by one third (from approximately 9.5 per 100,000 in 2001 to approximately 6.3 per 100,000 by the end of 2010)
3. To decrease the incidence of elder suicide in Florida by one third (from approximately 20 per 100,000 in 2001 to approximately 13.3 per 100,000 by the end of 2010)

To accomplish these goals, the *Strategy* includes a number of related objectives, which focus on implementing policies and programs discussed in the following chapters.

These objectives are:

OBJECTIVE 1: Raise awareness and disseminate information about the risk factors and warning signs associated with suicide.

OBJECTIVE 2: Overcome the reluctance to talk about suicide as a major debilitating social phenomenon.

OBJECTIVE 3: Debunk myths about suicide that lead to greater risk of suicide or hinder its prevention.

OBJECTIVE 4: Implement prevention, intervention, and treatment activities that are effective in prevention of suicide and suicide attempts

OBJECTIVE 5: Expand accessibility to substance abuse and mental health treatment.

OBJECTIVE 6: Mitigate risk among potential suicides by reducing access to lethal means.

OBJECTIVE 7: Provide training to gatekeepers and first responders on intervention skills in threatening situations.

OBJECTIVE 8: Implement screening systems to help identify those at risk for suicide.

OBJECTIVE 9: Support research for improved prevention and treatment modalities.

OBJECTIVE 10: Develop broad-based support for suicide prevention.

Only by setting policies and following through with programs in all of the areas and all of the ways outlined in this *Strategy* can we hope to address the complexity of the challenge. As new tools become available (e.g., research data, treatment modalities, survey instruments, pharmacological breakthroughs, funding opportunities, and so forth) this *Strategy* will seek to integrate them into its plan of action. We are resolved to reach our goals, however, and submit this *Strategy* as a means to that end.

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[1] *About Suicide, 2004* (On-line). American Foundation for Suicide Prevention. Available: http://www.afsp.org/index-1.htm.

[2] *Florida Vital Statistics Annual Report, 2003*. (Data to be published in the CD-ROM entitled Florida Vital Statistics Annual Report, 2003.) (p.79, Chart D-13).

[3] Arias, E., Anderson, R.N., Kung, H.C., Murphy, S.L., & Kochanek, K.D. (2003). *Deaths: Final data for 2001.* National Vital Statistics Reports, 52. (Data to be published in the CD-ROM entitled Vital Statistics of the United States, Mortality, 2001.) (p.91, Table 39).

[4] *Understanding and helping the suicidal individual: Be aware of the facts.* American Association of Suicidology. (On-line). Available: www.suicidology.org.

[5] The National Institute on Mental Health. *Frequently Asked Questions About Suicide*. (On-line). Available: http://www.nimh.nih.gov/suicideprevention/suicidefaq.cfm

[6] American Association of Suicidology. *Elderly Suicide Fact Sheet, 2002*. (On-Line). Available: www.suicidology.org.

FOREWORD

Florida Suicide Prevention Strategy
January 2005

Florida is renowned nationally and internationally as a place to enjoy life. A leading destination of vacationers, retirees, and people seeking to build a better life for themselves, our state can be justly proud of its reputation for natural beauty, security, prosperity, opportunity, and a pleasant lifestyle. Throughout their history, citizens and government in Florida have partnered to enhance the many natural gifts Florida has to offer to residents and visitors. The results have been impressive: land and water systems have been well-managed even as population growth has been among the highest in the nation for decades; jobs have continued to grow despite the ups and downs of national economic trends; public safety and excellent health services are the expected norm, as is quality education at every level of learning. All in all, the predominant view is that Florida is an attractive place to live.

Despite this, the turn of the century from the twentieth to the twenty-first has seen over two thousand of Florida's citizens annually take their own lives. This is more than twice the number of people murdered and two-thirds the number killed in highway accidents. Sadly, for some tragic reason, thousands of Floridians have chosen to end their lives rather than see where their paths might lead in this land of opportunity.

Yet nothing in this obvious irony marks a point of debarkation from the way things have been for a long time. For decades, in Florida as well as the nation as a whole, the incidence of suicide has unfolded at a depressingly constant rate. As the discussion that follows will document, suicide is one of the major causes of death for people of all ages, from their teens into old age. Despite this phenomenon—some would even say because of it (and the stigma with which it is associated)—it is one of the most unremarked social problems in the nation. While the annual death tolls equate to the losses in some of our more deadly wars, the pervasiveness of suicide in American society hides behind a void of discussion on its cause and effect. At the very same time that experts agree suicides are among the most preventable of all causes of human fatality, there is seldom public discussion of its scope and methods of prevention. To some degree, this absence allows suicide to proceed unchecked.

This strategy means to displace that void. Its objective is to lower the suicide rate in Florida. Several years ago, spurred by a grass roots conviction that more could and should be done, Florida's political leaders—and specifically the Governor—undertook a coordinated policy to integrate and further develop state policies that would result in integrated programs whose cumulative effect would be to appreciably lower the incidence of suicide. Beginning in 2000, a review of existing state-supported prevention efforts (there were several in place, usually separate and distinct from one another) was undertaken by a newly formed Suicide Prevention Task Force. As a result of that effort, the state produced a Policy Paper entitled *Preventing Suicide in Florida* (published September, 2002). Specifically, its goal was to lower the overall suicide rate by one-third by 2005. Suicide rates have decreased slightly since the publication of the White Paper but not significantly enough to reach the goal.

As various pilot programs initiated in the wake of that White Paper have matured over the ensuing months, and as the associated public information effort has grown, it is time to further develop the statewide approach to suicide prevention. This strategy is designed to add depth and momentum to the efforts consolidated and recharged in the first few years of this century. It is designed to serve as both a guide and an action agenda for preventing suicide in Florida, to have a lasting impact in bringing suicide to the forefront as a public issue, and over time to save thousands of lives that would otherwise be taken by their own hands.

CHAPTER ONE: An Overview of Suicide

Suicide in Florida

Suicide is America's 11th leading cause of death, claiming the lives of over 30,000 Americans per year.[1] Of those deaths, 2,294 occurred within the state of Florida in 2003, at a rate of 13.4 per 100,000.[2] Compared to the 1,004 homicides that occurred in Florida in 2003 (see Appendix A), the suicide rate is over twice the homicide rate. In spite of this reality, homicide rates get wide public coverage and policy response, while suicide is often tragically overlooked as a private matter pertaining only to the family involved.

Just as startling are the demographic (i.e., race and gender) disparities of those who have committed suicide. As figure 1 illustrates, among those who complete suicide, white males dominate at overwhelming rates. When looking at the demographics of those who died by suicide in Florida in 2002, 26.9 per 100,000 were white males, while 7.4 per 100,000 were white females, 5.7 per 100,000 were nonwhite males, and 1.3 per 100,000 were nonwhite females.[4] Such disparate rates have remained fixed over time.

Figure 1. Suicide Death Rates Per 100,000 Population by Race and Gender, Florida, 1992-2002

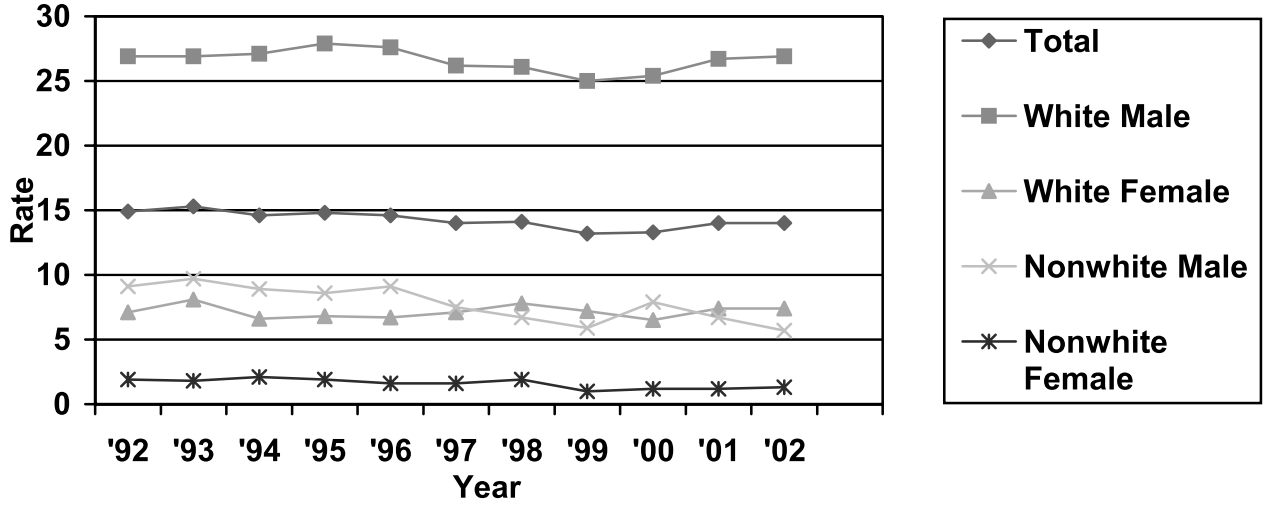

Figure 1 recreated using data from the Florida Vital Statistics Annual Report, 2002[3]

In 2001, Florida ranked 13th in the nation for the rate of completed suicides.[5] Florida's suicide rate increased by 125% between 1950 and 2002. The most significant increases in the rate occurred from 1950 to 1990, after which the rate of increase slowed, dropping in five years over the course of the final decade of the century.[6] The slight decrease of approximately one percent in Florida's suicide rate over the past 10 years is encouraging, but the current rate is far from acceptable.[7] The situation across the nation and within the state of Florida remains dire, a death rate that is far too high.

National Suicide Trends

Nationally, there are 83 suicides per day, which equates to one suicide every 17 minutes. Although some describe the nation's suicide rate as mostly stable with slight increases over time, the statistics indicate a different historical pattern. For example, the period of time spanning 1952 and 1992 saw the incidence of suicide among adolescents and young adults nearly triple.[8] Not only has the suicide rate fluctuated over the decades, but the method of suicide has also changed. Whereas females have historically used less overtly violent means to commit suicide (e.g., overdose), firearms are now the most frequently used method of suicide across all groups (i.e., male, female, young, elderly, whites, and non-whites).[9]

Appendix B details, in a series of tables, the U.S. suicide rates from 1990 through 2001 and information on completions, attempts, and suicide methods.[10] Information gleaned from such primary sources can provide valuable information about directions in which to guide preventive efforts. For example, as it becomes apparent that access to and the availability of firearms are significant factors in the increase of youth suicides, precautions against youth access to firearms, particularly for those who have evidenced suicide ideation, would be a logical prevention step.

Figure 2 provides a glimpse of the national suicide rate as it compares to Florida's suicide rate from 1990 through 2002.[11] For well over the past decade, Florida's suicide rate has consistently exceeded the national suicide rate. The most recent data (2001) indicate that the national average was 10.8/100,000, compared to Florida's 14.1/100,000.[12]

Figure 2: National and Florida Suicide Rates: 1990-2002.

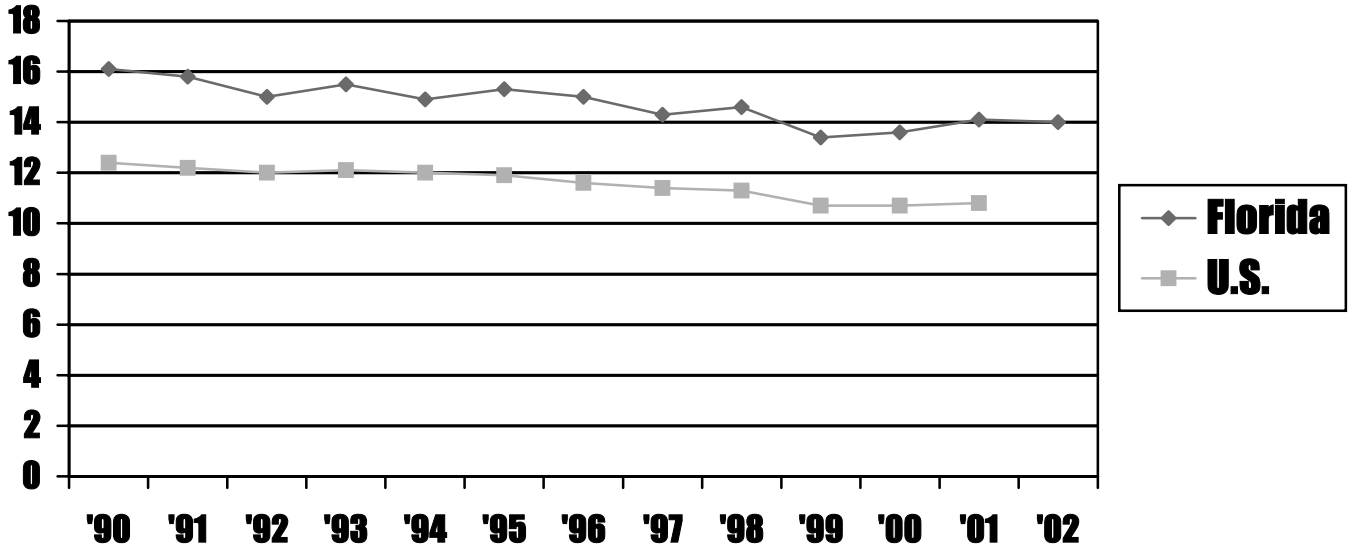

Figure 2: National and Florida Suicide Rates: 1990-2002.

Complexity of Suicide

Suicides can be cyclic or episodic, sometimes with apparent reason and at other times defying any apparent logic. For example, increases in suicides have been observed during times of economic stress, while suicides decrease in times of war. Suicides are most likely to occur during the spring season and on Mondays.[13] Experts have proposed several theories for this phenomenon. One study suggested suicides are often triggered by

social activity, and correlates to yet another study that suggested a "broken promise effect" whereby disheartened feelings result from the discrepancy between how one actually feels and how one expects to feel.[14] Different times of the year, indeed even days of the week, display distinct patterns. Spring, Mondays, and holidays are filled with the promise of euphoria, hope, romance, and new beginnings, but often fail to deliver. The day-of-the-week pattern of suicide appears to be most notable among middle-aged people with full-time jobs outside of the home.[15]

Suicides are often related to the presence of mental disorders. In general, heightened risk factors for suicide attempts in adults are depression, affective disorders, schizophrenia, alcohol and drug dependence, personality disorders, previous suicide attempts, and separation or divorce. Risk factors related to suicide are often associated with stressful life events such as loss of loved ones or incarceration. The countless variables in risk factors present a great deal of complexity in understanding the causes and, therefore, the prevention of suicide.

Suicide Attempts

There is no official data currently compiled detailing the rate of suicide attempts, (vice actual suicides) at local or national level. Gathering such information presents a formidable challenge. The process of classifying a death as suicide has been a consistent, contentious problem within the suicide literature, as the ruling remains subjective.[16] One source offers the following estimates of national suicide attempts, but cautions that no official U.S. national data are compiled with regards to suicide attempts:[17]

- 765,000 annual attempts in U.S. (using an assumed 25:1 ratio of attempts to completions).
- 25 attempts for every death by suicide for the nation (100-200:1 for the young; 4:1 for elderly).
- 5 million living Americans (estimate) have attempted to kill themselves.
- 3 female attempts for each male attempt.

These numbers are all educated and informed estimates. A separate source estimated that there are at least 8 to 20 attempts for each death that occurs by suicide.[18] Females and young people are at greatest risk for attempting suicide, with females making an average of 3 to 4 times as many attempts to end their lives as males, although males far and away have a higher completion rate.[19]

Issues Across the Lifespan

A cursory review of suicide-related data indicates the following:

- Suicide is the eleventh leading cause of death in the US.[20]
- Youth (ages 15-24) suicide rates have tripled since the 1950's, making it currently the third leading cause of death among young people.[21] Approximately 12 young people between the ages of 15-24 die every day by suicide. On average, every two hours in the United States someone under the age of 25 commits suicide.
- Suicide rates for those 15-19 years old increased by 11% between 1980 and 1997. Suicide rates for those between ages 10-14, increased 99% between 1980 and 1997. However, both age groups have shown small declines in rates since 1997.[22]
- Four times as many men kill themselves as compared to women, yet three to four times as many women attempt suicide as compared to men.[23]
- Surviving family members of suicide victims are at increased risk of experiencing emotional problems and attempting suicide.[24]

- Suicide rates of whites are approximately twice those of nonwhites as a whole.[25] Suicide rates for young white men have increased in each of the past three decades. Although rates increased for young black males (and other races among males), their rates have remained lower than those for young white males. Rates for young white females and non-white females have remained relatively stable over time.[26]
- Since 1933 (the first year states began reporting deaths) elderly adults have had the highest suicide rate. Suicide rates increase with age and are highest among white men aged 85 and older.[27]
- Within Florida, of the 2,332 residents who died by suicide in 2002, 544 were over the age of 65. More than 10 Floridians over the age of 65 die by suicide each week.
- Ninety percent of all suicides are associated with substance use and/or mental illnesses, the latter often undiagnosed and/or untreated.[28]
- There are 20 homicide-suicides* each week nationwide.[29] Nearly all homicide-suicides in older persons involve a husband who kills his wife before killing himself.[30]

National Perspective: Strategies at the National Level

The Centers for Disease Control and Prevention (CDC) has demonstrated commendable efforts to address the suicide problem at both national and state levels. [31] In 1999, the Surgeon General's office issued a paper entitled *Call to Action to Prevent Suicide*. This document has been widely accepted as a blueprint for addressing suicidal behavior and outlines 15 recommendations centered around three key themes:

- *Awareness* – broadening the public's awareness of suicide and its risk factors.
- *Intervention* – enhancing population-based and clinical care services and programs.
- *Methodology* – advancing the science of suicide prevention (e.g., improving our understanding of risk and protective factors, their interaction, and their impact on suicidal behavior).

Since its release, the Awareness, Intervention, and Methodology (AIM) model has been adopted by several states to establish suicide prevention programs in their communities.

The latest national strategy to combat suicide is the President's New Freedom Commission on Mental Health. The Commission was established by President George W. Bush in April 2002 as a part of his efforts to end inequality for Americans with disabilities. President Bush directed the Commission to identify policies that could be implemented at the federal, state, and local levels "to maximize the utility of existing resources, improve coordination of treatments and services, and promote successful community integration for adults with serious mental illnesses and children with a serious emotional disturbance."[32]

The 22 Commissioners met monthly between June 2002 and April 2003, analyzing public and private mental health systems, visiting model programs countrywide, and listening to testimonials of those with an unyielding commitment to mental health issues. The Commission compiled the comments and feedback of approximately 2,500 people in 50 states, developed 15 subcommittees to examine specific aspects of mental health services, and recommended improvements. The Commission included in its work the National Strategy for Suicide Prevention. This strategy encompasses a comprehensive and multi-systemic approach to reducing the pain inflicted in the lives of so many due to suicide and suicidal behaviors.[33] The National Strategy's framework seeks to develop policies and programs to modify attitudes about suicide thereby, promoting changes in the judicial, educational, social service, and health care systems that addresses it as a social phenomenon.

Approximately half the nation's states, including Florida, convened at two key regional training conferences in Denver and New Orleans in 2003 to exchange views on the best approaches to suicide prevention efforts.[34] The conferences were hosted by the Suicide Prevention Resource Center (SPRC), one of the newest federally funded prevention entities in the country. The goal of the SPRC is to provide a collaborative approach to reducing the suicide rates. States with preexisting programs honed their strategies with information gathered from these conferences and events, while states in the initial planning phases gained a great deal of information and clear direction in which to channel that knowledge. All recognized that preventing suicide is a large responsibility – one that will ultimately require the combined efforts of each of the states and territories of the United States.

A Chronology of Suicide Prevention in Florida: The Past Twenty Years

Looking back twenty years, Florida has attempted to address suicide prevention through a variety of efforts. Below is a brief chronology of events from 1984 to the present.

1984: The Florida Legislature recognized the critical need for suicide prevention by passing the *Florida Emotional Development and Suicide Prevention Act* (Chapter 84-317). This act required the (former) Department of Health Rehabilitative Services, in cooperation with the Florida Department of Education (FDOE) and Law Enforcement (FDLE) to develop a state plan to address youth suicide. The Task Force concluded that while a number of service components existed in many districts, coordination and supplementation of these services was necessary in order to establish a starting point for the development of a full continuum of services. This continuum would need to include coordinated efforts in the areas of suicide prevention, intervention, and treatment.

1985: Subsequently, state officials developed a Comprehensive Plan. This plan provided a model that addressed prevention, intervention, and treatment strategies in detail. However, the plan was never implemented.

1990: Florida made suicide prevention training a requirement for teacher certification. It was mandated that a life-management skills class be taught at the secondary education level and include suicide awareness. This requirement has since been vacated.

1998: Department of Children and Families (DCF) funded a *Youth Suicide Prevention Study, Report to the Florida Legislature* presented by the Louis de la Parte Florida Mental Health Institute at the University of South Florida. This study described the state of affairs in Florida's programs for children, youth, and their families addressing suicide prevention, knowledgeable intervention strategies, and promising practices that have been successful in reducing the risk factors associated with incidence of child and youth suicide. The report was completed in September 1999.

1999: The Florida House of Representatives passed *House Resolution No. 9233* a resolution encouraging suicide prevention efforts. The Florida Senate passed a similar resolution, *Senate Resolution No. 2684,* in the same year. The Florida Senate recognized suicide as a state problem and declared suicide prevention to be a state priority. Also in 1999, The Florida Department of Education introduced the SAFE School Action Planning and Preparedness Program. School Critical Response Plans incorporated recognition of suicide threats and gestures at all levels.

January 2000: Governor Jeb Bush met with grass roots suicide prevention activists and directed the Florida Office of Drug Control to assist in decreasing the incidence of suicide in Florida.

June 2000: The Adolescent Prevention Plan Task Force Report to the Florida Department of Health was completed and submitted. This document is available at www.ac.wwu.edu/~hayden/spsp

November 2000: At the direction of the Governor, the Director of the Florida Office of Drug Control, along with representation from the Florida Initiative for Suicide Prevention (FISP), Department of Children and Families (DCF), Department of Corrections (DOC), Department of Juvenile Justice (DJJ), Department of Education (DOE), Department of Health (DOH), Agency for Health Care Administration (AHCA), Department of Elder Affairs (DOEA), the University of South Florida (USF), The Beth Foundation, and Suicide Prevention Action Network of Florida (SPAN-FL) established a state suicide prevention task force. The resulting organization became known as the Florida Task Force on Suicide Prevention.

August 2002: The Florida Task Force on Suicide Prevention announced the *Statewide Suicide Prevention Strategy* to reduce the incidence of suicide in Florida by one-third by 2005. This strategy is available at: http://www.myflorida.com/myflorida/government/governorinitiatives/drugcontrol/suicide_prev.html

October 2002: Thirty individuals from across the state met at the Florida National Guard's Camp Blanding for a three-day meeting to learn about coalition building and to formalize the organization of the Florida Suicide Prevention Coalition, a grassroots effort to reduce suicide. For more information, visit www.floridasuicideprevention.org.

March 2003: Governor Bush held a press conference and signed a proclamation declaring March 23, 2003, "Suicide Prevention Day -- A Day to Focus on Suicide Prevention Awareness." The Governor gave an impassioned statement regarding the need to reduce the incidence of suicide and cited the Strategy Paper as the beginning. The Governor announced that he and his wife, Columba, would be pleased to accept the invitation to serve as honorary Chairpersons of the Suicide Prevention Coalition. The Coalition set up tables and quilts in the rotunda of the Capitol and made visits to legislators with packets explaining the tragedy of suicide in Florida and in their respective communities.

November 2003: The Florida Suicide Prevention Task Force Legislative committee drafted a bill to:

1. Establish suicide prevention as a priority by codifying the Suicide Prevention Coordinating Council (f/k/a the Florida Suicide Prevention Task Force) in statute
2. Provide a full-time employee to coordinate the state's suicide prevention efforts

November 2003: The Florida Suicide Prevention Coalition in partnership with the Suicide Prevention Coalition of Volusia/Flagler Counties held a suicide prevention conference in Daytona Beach with the theme, "Making Strides to Save Lives".

February 2004: Suicide prevention partners from Florida and across the nation met to brief Governor and Mrs. Bush on collaborative efforts. Participants included representatives from the Florida Senate, Columbia University's Teen Screen Program, the Jason Foundation, the Kristen Brooks Hope Center, University of South Florida, NOVA Southeastern, the Suicide Prevention Coalition, SPAN-USA, and the Office of Drug Control. In addition to the briefing with the Governor, members of the Florida Task Force on Suicide Prevention met to update the 2002 Suicide Prevention Strategy. During the month of February, the Task Force tracked House Bill 0897 and Senate Bill 2042. These bills were introduced to create a Statewide Office for Suicide Prevention that would include a full-time employee dedicated to reducing suicide, establish a Suicide Prevention Coordinating Council, and provide an appropriation of $100,000 to reduce suicide. Neither of the bills passed due to their fiscal impact during a tight budget year for the legislature. Funding was an essential part of the bills and will hopefully be provided in the future.

March 2004: The second Suicide Prevention Awareness Day at the Capitol was held in partnership with the Florida Suicide Prevention Coalition and the Governor's Florida Task Force on Suicide Prevention. The Governor proclaimed March 23, 2004 as "Florida Suicide Prevention Day - A Day to Focus on Suicide Prevention

Awareness". The Governor, First Lady, and Director of the Office of Drug Control gave moving comments on the tragedy of suicide. Charles Curie, Administrator of the Substance Abuse and Mental Health Services Administration (SAMHSA) also participated in the event and commended Florida for its commitment to the reduction of suicide. Displays from grassroots organizations and state agencies were displayed in the Rotunda to educate legislators, employees, and visitors about suicide prevention.

By the **Summer of 2004**, Florida's efforts to decrease its suicide rates had coalesced to the degree that it was time to codify and further direct integrated state activity in an overarching strategy. This document is that strategy.

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[*] Homicide-suicide is a situation in which a perpetrator kills a victim and then commits suicide shortly thereafter.

[1] *About Suicide, 2004* (On-line). American Foundation for Suicide Prevention. Available: http://www.afsp.org/index-1.htm.

[2] *Florida Vital Statistics Annual Report, 2003*. (Data to be published in the CD-ROM entitled Florida Vital Statistics Annual Report, 2003.) (p.79, Chart D-13).

[3] *Florida Vital Statistics Annual Report, 2002*. (Data to be published in the CD-ROM entitled Florida Vital Statistics Annual Report, 2002.) (p.79, Chart D-11).

[4] *Florida Vital Statistics Annual Report, 2002*. (Data to be published in the CD-ROM entitled Florida Vital Statistics Annual Report, 2002.) (p.79, Chart D-11).

[5] *Facts About Suicide.* Lifeline of Central Florida. (On-line). Available: www.charityadvantage.com/lifelinecentralflorida.

[6] *Florida Vital Statistics Annual Report, 2002*. (Data to be published in the CD-ROM entitled Florida Vital Statistics Annual Report, 2002.) (p.79, Chart D-13).

[7] *Florida Vital Statistics Annual Report, 2002*. (Data to be published in the CD-ROM entitled Florida Vital Statistics Annual Report, 2002.) (p.79, Chart D-13).

[8] *Some Facts About Suicide in the U.S.A., 2002* (On-line). American Association of Suicidology. Available: www.suicidology.org.

[9] *Some Facts About Suicide in the U.S.A., 2002* (On-line). American Association of Suicidology. Available: www.suicidology.org.

[10] Arias, E., Anderson, R.N., Kung, H.C., Murphy, S.L., & Kochanek, K.D. (2003). *Deaths: Final data for 2001.* National Vital Statistics Reports, 52. (Data to be published in the CD-ROM entitled Vital Statistics of the United States, Mortality, 2001.) (p.91, Table 39).

[11] The Beth Foundation, 2004. (On-line). Available: www.thebethfoundation.com/images/floridarates1.gif.

[12] The Beth Foundation, 2004. (On-line). Available: www.thebethfoundation.com/images/floridarates1.gif.

[13] *Facts About Suicide.* Lifeline of Central Florida. (On-line). Available: www.charityadvantage.com/lifelinecentralflorida.

[14] Durkheim E. (1897). *Le suicide.* Paris: Felix Alcan.; Gabennesch H. (1988). *When promises fail: A theory of the temporal fluctuations of suicide.* Social Forces, 67:129-145.

[15] McCleary R, Chew KSY, Hellsten JJ, Flynn-Bransford M. (1991). *Age- and sex-specific cycles in United States suicides: 1973-1985*. American Journal of Public Health, 81:1494-1497.

[16] Kleck, G. (1988). *Miscounting suicides.* Suicide and Life-Threatening Behavior, *18:*219-235.; McCarthy, P.D., & Walsh, D. Suicide in Dublin, I. (1975). *The under-reporting of suicide and the consequences for national statistics*. British Journal of Psychiatry, *126:*301-308.; Sainsbury, P., & Jenkins, J.S. (1982). *The accuracy of officially reported suicide statistics for purposes of epidemiological research*. Journal of Epidemiology and Community Health, *36:*43-48.; Speechley, M., Stavraky, K.M. (1991). *The adequacy of suicide statistics for use in epidemiology and public health*. Canadian Journal of Public Health, *82:*38-42.

[17] Arias, E., Anderson, R.N., Kung, H.C., Murphy, S.L., & Kochanek, K.D. (2003). *Deaths: Final data for 2001.* National Vital Statistics Reports, 52. (Data to be published in the CD-ROM entitled Vital Statistics of the United States, Mortality, 2001.) (p.91, Table 39).

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CHAPTER TWO:
Extent of the Problem

While suicide is a widespread phenomenon that cuts across class, race, ethnic, and socio-economic lines, its impact is much more severe among particular segments of the population. If we are to succeed in achieving our overall goals, we will need to address the risk and protective factors of each of these particular groups. For example, although the rate of suicide among teenagers is lower than the rate for the entire population, it is for them the third leading cause of death. While women attempt suicide at a much higher rate than men, men kill themselves at many times the rate of women. Among older adults, the rates of suicide jump starkly when they enter the seventh decade of life. Ethnicity also seems to make a difference in the incidence of suicide. When further correlated to gender, the disparities in rates are astonishing. In 2002, for example, 17 times as many whites as non-whites dies by their own hand in Florida; that same year, more than 20 times as many white females as non-white females committed suicide. (See Appendix A.)

Not only do suicide rates differ by gender, age cohort, and ethnicity, they also appear to be affected by other factors. People with mental illnesses, for example, are at greater risk of suicide. So too are the indigent (many of whom experience mental illnesses). The incarcerated are much more likely to commit suicide than the population at large, with men comprising approximately 95% of incarceree suicides.

In short, while every segment of the population is at risk for suicide, some are at greater risk than others. This strategy takes the approach that in order to achieve our overall objectives we must develop specific approaches for separate segments of the population, particularly those that are most at risk. What follows in this chapter, therefore, is a more detailed discussion of the affects of suicide among particular groups. Only with a fuller understanding of the problem in its individual parts can we hope to develop policies and programs to solve the overarching problem.

Risk and Protective Factors

Prior to describing the specific rates of suicide in each segment of the population, it is essential to provide a brief introduction to the concept of risk and protective factors. For purposes of this strategy, risk factors are predictors of potential problem behaviors. They make it more likely for individuals to develop a disorder. Risk factors may encompass biological, psychological or social factors in the individual, family, and environment.[1] The more risk factors a person has the greater the likelihood that he or she will participate in destructive behaviors such as substance abuse, violence, and suicide. At the other end of the spectrum, protective factors are the positive attitudes, attributes and behaviors of the individual and the surrounding environment that offset the risk factors. All individuals experience some mix of risk and protective factors. The reapportionment of these factors so that protections outweigh risks is essential to a healthy lifestyle.

The study of risk and protective factors is essential to understanding the causes of suicide. While protective factors can affect risk factors, the converse is also true. Therefore, awareness and/or measurement of counterbalancing risk and protective factors are important to determining the best courses of action in both the macro and micro (i.e., general and specific) sense. Like other risky behaviors (including substance abuse, teen pregnancy and violence) a number of risk and protective factors related to suicidal behavior have been identified.

Risk Factors

- Mental disorders

- Substance abuse disorders
- A sense of hopelessness
- Impulsive and/or aggressive tendencies
- History of trauma or abuse
- Some major physical illnesses
- Previous suicide attempts
- Family history of suicide
- Job or financial loss
- Relational or social loss
- Easy access to lethal means
- Local clusters of suicide that have a contagious influence
- Lack of social support and sense of isolation
- Stigma associated with help-seeking behavior
- Barriers to accessing health care, especially mental health and substance abuse treatment
- Certain cultural and religious beliefs (for instance, the belief that suicide is a noble resolution of a personal dilemma)
- Exposure to, and influence of others who have died by suicide
- Sensationalized media coverage of suicide

Protective Factors[2]

- Effective clinical care for mental, physical, and substance abuse disorders
- Easy access to a variety of clinical intervention and support for help-seeking
- Restricted access to highly lethal means of suicide
- Strong connections to family and community support
- Support through ongoing medical and mental health care relationships
- Skills in problem solving conflict resolution, and nonviolent handling of disputes
- Cultural and religious beliefs that discourage suicide and support self-preservation
- Participation in recovery-oriented treatment approaches (which includes housing, employment, family education, integrated dual diagnosis treatment)

Demographic Factors

While demographic factors such as gender, race, and ethnicity may not intrinsically affect risk factors for suicide, they do impact its manifestation. As discussed earlier, adolescent males and white teenagers kill themselves at a higher frequency than adolescent females and African American teenagers. However, the gap in the suicide rate between white and nonwhite males has narrowed over the past decade.[3]

Efforts over the years to discern plausible explanations for this discrepancy suffer from a paucity of research on suicide risk among African American teenagers. Previous research, however, has identified that psychiatric disturbances, stressful life events, and poor parent-child relationships contribute significantly to the discrepancy in suicide among white and African American teenagers. [4] In a comparison study of substance dependent individuals who had attempted suicide, it was noted that the groups were similar, but African Americans reported

less childhood emotional neglect, less family history of suicide, and fewer legal problems than their Caucasian counterparts.[5] Of the risk factors listed above, depression appears to be the most problematic.[6] Adolescents with depression attempt and complete suicide at higher rates than those without depression. Nonetheless, researchers are compelled to seek additional mitigating factors between cause and effect if we are to determine proper responses.

Youth

Nationally, youth ages 10-14 died by suicide at a rate of 1.30 per 100,000 in 2001.[7] While that may appear to be a mercifully low rate, the fact remains that it reflects a virtual doubling between 1980 and 1997.[8] Youth ages 15-19 died by suicide at a rate of 7.95 per 100,000 in 2001; their suicide rate increased by 11% between 1980 and 1997. [9]

While statistics form a foundation for analyzing any issue, to include one as tragic as suicide, the barren numbers fail to convey the emotional devastation suffered by families, friends, and neighbors of someone who takes his or her own life. Grief is a harsh reality for all survivors of suicide, but for the parents of lost children it is magnified by many tortured questions (e.g., "why did he/she do it?" "What could have been so wrong in his/her life?" What could I have done to prevent it?"). Children are our future. They represent the best of our aspirations and ideals. The pain and remorse at their death, particularly when by their own hand, are among the most devastating emotions a parent (or a sibling, family member, or friend) can experience. Sadly, for the young, suicide ranks among the leading causes of death.

Recent data give trend indications on current suicide rates among youth 10-19 years of age as well as in the method of suicide among this population. [10] Overall suicide rates for youth aged 10-19 years in the United States declined during 1992-2001 from 6.2 to 4.6 per 100,000 population, along with significant changes in the method of suicide. Rates of suicide using firearms and poisoning decreased, while suicides by suffocation (i.e., hanging) increased. By the end of the period, suffocation had surpassed firearms as the most common method of suicide among youth 10-14 years of age. In 2001, a total of 1.8 suffocation suicides occurred for every firearm suicide among youths aged 10-14 years. However, among 15-19 year-olds in 2001, firearms remained the most common method of suicide (at a ratio of 0.7 suffocation suicides for every firearm suicide), although the rate of suicides via suffocation increased significantly during the reported period.

Just as complex as the suicide issue itself are the reasons why people select various means to kill themselves. Increases in suffocation suicides and decreases in firearm suicides suggest that persons aged 10-19 years are choosing different kinds of suicide methods than in the past. This could be related to availability and accessibility issues. Centers for Disease Control and Prevention researchers and other experts believe that restrictions to children's access to firearms could be a salient contributing factor in the lowered incidence of suicide. This observation suggests that limiting access to other means of suicide, whenever possible could have similar effects on the reduction of suicide rates.

Suicidal ideation is a unique risk behavior for some youth, but suicide is generally attributable to a number of risk behaviors particularly germane to the young. [11] As complex as their inter-relationships might be, by understanding risk factors we can attempt to devise effective intervention and prevention strategies. Research from psychological autopsies (i.e., reconstructions of suicides via interviews with survivors to understand the reasons for the death) and epidemiological surveys of non-lethal suicidal behavior reveal several key risk factors:[12]

- *Psychological Impairment:* The majority of youth who die by suicide experience significant psychiatric problems, including prior suicide attempts.[13] Depressive disorders are the most prevalent, whereas schizophrenia accounts for few youth suicides.[14]

- *Substance Abuse:* Drug and alcohol abuse is a significant risk factor, particularly among older adolescents. Although among the greatest predictors of suicide, addictive disorders and intoxication frequently go unrecognized as such.[15] In fact, most people (including people who work in the substance abuse field) are unaware of the strong correlation between substance abuse and suicide; the risk becomes even greater when substance abuse co-occurs with mental illnesses. Of those who consider suicide, substance abuse is the main reason 35% of the time.[16] Nearly twice as many college students (under age 25) who consume alcohol, use illicit drugs, or smoke cigarettes contemplate suicide as compared to those who do not indulge in these substances.[17]
- *Cognitive Factors:* Cognitions are thoughts, beliefs, assumptions, expectations, attributions, and attitudes. Cognitive habits have been identified as one of the primary contributing and maintenance factors for psychological problems. Pioneer psychologists Albert Ellis and Aaron Beck theorized that distorted cognitions cause psychological impairment such as anxiety, depression, anger, and guilt. Based upon their research, they recommend Cognitive Behavioral Therapy (CBT) techniques, Rational Emotive Behavior Therapy (REBT) and Cognitive Therapy to assist in restructuring cognitions and thought processes to better deal with reality.[18] Among the distorted cognitions that are believed to contribute to youth suicidal behavior are a sense of hopelessness and poor interpersonal skills.[19]
- *Stressful Life Events:* Interpersonal difficulties (e.g., ending a relationship) and/or legal or disciplinary problems are frequently associated with youth suicide.[20] The intensity of the stressors varies depending on the prevalence of psychiatric disturbance and/or substance use. Specific stressors such as legal or disciplinary problems are associated with an increased risk for suicide, irrespective of the presence of psychiatric impairment or substance use.[21]
- *Family Factors:* Several family factors are associated with an increase of youth suicide. These include family history of suicidal behavior, familial dysfunction, poor communication with parents, and deficient emotional bonding.[22] Although suicide victims are more likely to come from non-intact families, the overall impact of divorce on suicide risk is very small.[23]
- *Contagion:* Evidence clearly suggests that a dramatic surge in suicides occurs following reports of suicide in the mass media – including newspaper articles, television news reports, and fictional dramatizations.[24] The extent of the contagion depends on the style of the reporting. For example, reports that focus on gory details, promote excessive publicity, or allude to elements of prestige associated with the suicide being reported can lead to higher incidences of suicide attempts and completions.[25]
- *Socioenvironmental Factors:* Problems in school, unemployment, not attending school, and not attending college add significant suicide risk for youth.[26] Youth who do not work or attend school regularly are considered drifters and experience isolation, lack of affiliations, and poor social support systems, all stressors that can lead to suicidal ideation and behavior.[27] Recent data reveal an association between youth suicide and violence against oneself (e.g., suicidal behavior) and violence against others.[28] While extreme forms of violence against others has demonstrated its impact on suicidality among youth, it is important to note that mild forms of aggression such as fighting in school are also associated with an increased risk for suicide.[29]
- *Biological Risk Factors:* Limited research suggests that suicidal behavior among youth is associated with a dysregulated serotonergic system. Serotonin is one of dozens of neurotransmitters produced by the body. Abnormalities in the serotonergic system are implicated in the development of many psychiatric

disorders as well as aggression and impulsivity.[30] Reduced levels of serotonin seems to be predictive of future suicidal behavior.[31]

While there are many risk factors that likely contribute to youth suicide, the foregoing are among the most frequently identified. Because youth suicide is not attributable to any single factor, intervention strategies must adjust accordingly to address multiple risk factors.

Adults (ages 25-64)

If we are to make progress toward bringing suicide rates down in Florida, we will need to make significant inroads into the segments of the population experiencing the highest rates of suicide. While suicide is a leading cause of death among teens and experiences its highest rate among elders, the highest toll in terms of absolute numbers as well as the percent of overall suicides falls on adults, particularly adult males, and more specifically white adult males. In 2001, 67% of the suicides in Florida were among adults between the ages of 25 and 64.

The tables in Appendix C grimly depict the high number of adults who kill themselves each year in the U.S. and in Florida (National Center for Health Statistics Vital Statistics System for numbers of deaths). Appendix C shows the number of suicide deaths in Florida broken down by county. Clearly, increased suicide rates correlate with age. The older you are, the greater the risk of suicide (with occasional exceptions). Age, therefore, appears to be a substantial risk factor for suicide. Moreover, for every age group (other than 5-9 years of age), Florida's suicide rates surpass the national rates. Florida ranks 13th in the nation for suicides.[32] Suicide is the second leading cause of death among adults ages 25-34.[33] More than half of all suicides in the nation occur in adult men between the ages of 25 and 65.[34] In 2000, Caucasian males accounted for 73% of all suicides, a significant share vastly out of proportion to their numbers in the population as a whole.[35] Such alarming numbers clearly indicate a need for innovative intervention strategies targeting adults. While females attempt suicide three times as often as males, males die by suicide at a rate four times that of females.[36]

A sense of hopelessness (negative expectations about self and the future) is one of the most significant and consistent predictors of suicide among adults.[37] Feelings of hopelessness among adults are associated with several key factors: [38]

- Unemployment
- Reduced working capacity
- Financial hardship
- Poor general health
- Three or more adverse childhood experiences (e.g., poor relationships with parents, overly strict discipline style, physical punishment, domestic violence, alcohol abuse in household, etc.)
- Mental disorder
- Single, divorced, or widowed marital status among men
- Low educational level

While adult males tend to exhibit one or more of these risk factors in abundance, they pose a difficult population to research. The psychological preconditions, work requirements, and social outlooks of adult males all combine in varying degrees to limit both accessibility to and effectiveness of typical suicide prevention interventions. It is not surprising, therefore, that adult males evince a disproportionately high rate of suicide. The combination of accelerated risk and lack of protection leads to deadly outcomes.

To ensure suicide prevention programs are properly targeting this age group, data must be analyzed to determine where the largest percentages of the adult suicides are occurring. Where data are not available, psychological autopsies should be conducted to focus our efforts in the right direction. Since this group comprises the majority of suicides in our state, we will need to target this age group with focus and diligence. Only by targeting the majority of suicides and the subset of the population in which they are found can we hope to have significant impact on our suicide rate.

Elderly (Ages 65 and older)

The elderly, particularly older white males, comprise the highest risk group for suicide. Risk increases with age so that those 65 and older are more apt to die by suicide than any other group of individuals.[39] Comprising only 12.6% of the U.S. population, the elderly account for nearly 18.1% of all suicides.[40] Elderly adults have suicide rates that are six times higher than the national average.[41] Although they have fewer suicide attempts than other age groups, the actual suicide rate is higher for several reasons. First, the elderly tend to use more lethal methods, such as firearms, than other groups.[42] Second, whatever means they use, the elderly tend to have low survival rates due to frailty, physical illnesses, a sense of hopelessness, and lack of a desire to live. Alcohol and substance use, while strong risk factors for other age groups, play a decreasing but still significant role in suicides at upper age levels.[43]

Elderly individuals face many difficult circumstances, including but not limited to the death of spouses, siblings, relatives, and friends; physical illnesses, dementia and related psychiatric disorders; depression; isolation from families and communities; appreciable deterioration of physical functioning; and loss of self-esteem and a sense of purpose as their self-perceived ability to contribute to society decreases. The net effect is to create among some portion of the elderly a desire for an end of life.

Older adults face a complex set of issues that significantly affects their ability to minimize the risk factors associated with suicide. Depression related to bereavement, mental illnesses, isolation, poor health conditions, changing family dynamics and alcohol and drug addictions impact the older adult population more severely than other population groups. A diagnosis of depression was established in over 85% of completed suicides in individuals 60 years and older.[44] Psychological autopsy studies have found that mood disorders are more common among elders who die by suicide than among young adults who die by suicide.[45]

Social isolation among elders is high and contributes to the high incidence of depression among this population group. This same population group exhibits self-destructive behaviors of alcohol abuse, poor nutrition, and medication mismanagement that may or may not result in an overt suicide attempt. The latest data (2002-2003) from the Florida Department of Children and Families (DCF) indicate that of 20,489 suspected abuse cases, 30% were for self-neglect.

Depression is a more significant risk factor for suicide in the elderly than in younger adults.[46] The fact that it often co-occurs with other serious illnesses such as heart disease, stroke, diabetes, cancer, and Parkinson's disease contributes to the under diagnosis and treatment of depression in older adults. Older adults are unlikely to voluntarily report symptoms of depression and are generally uncommunicative about suicidal ideation and intent.[47] As a result, a number of researchers have found that depression goes unrecognized and remains untreated in 25% to 66% of all elderly patients.[48] Such non-recognition (or denial) tends to increase the risk of suicide. Feelings of loss of control tend to accelerate in the vacuum of non-recognition. The risk factors, therefore, tend to increase over time.

Findings published in the June 2003 issue of Archives of General Psychiatry indicate that depressed older adults at risk need intense and prolonged treatment for their depression. While anti-depressants eased suicidal

thoughts among the older adult group with major depression, those at particularly high risk took longer to respond to treatment. A second study released in the July 2003 issue of Alcoholism: Clinical and Experimental Research compared the rate of suicide among alcoholics. The study found a link between alcohol dependence and suicide, and an association between mood disorders and suicide that, in each instance, is intensified by advancing age.

Although medical illnesses in general are not significantly correlated with increased risk for suicide among elderly populations, researchers have recently discovered that chronic illnesses, such as seizure disorder, congestive heart failure, and chronic lung disease are associated with an increased risk for suicide. [49] The greatest suicide risk among the elderly is linked to depression, bipolar disorder, and severe pain.[50]

A rare, but increasingly frequent, tragedy that plagues older adults is homicide-suicide, where perpetrators kill someone (normally a loved one) and then proceed to take their own lives. This phenomenon is twice as prevalent among older adults than younger adults.[51] Research released in January 2000 by Donna Cohen, Ph.D., University of South Florida, directly addressed homicide-suicide among older adults. Her research indicates that seldom are these acts of love or altruism. In fact, they are often acts of depression and desperation. Her review of west central Florida cases found that 40% of the perpetrators had depression or other psychiatric problems, 11% were abusing alcohol or drugs, 15% had talked about suicide and 4% had attempted suicide. In southeastern Florida, 20% of the population studied were depressed, 10% had other mental health problems and 24% had talked about suicide. Evidence from the study shows that men are frequently the perpetrators who murder a wife or intimate partner, then commit suicide.

Nationwide, over 1,000 homicide-suicide related deaths occur each year among those age 55 and older.[52] Most often, the victims of these tragedies are not willing participants. The perpetrator usually suffers from depression or other psychiatric problems. One researcher identifies at least three types of homicide-suicides in older couples.[53] One common theme among all three types is a perception (real or imagined) by the perpetrator of threat to the continuity of the relationship. For example, an imminent move to a nursing home, a terminal illness, or marital problems may provoke a person to commit a homicide-suicide. The three types of homicide-suicide are as follows:

- *Dependent-Protective Homicide-Suicides* account for approximately half of all homicide-suicides. In these situations, the couple has grown dependent upon one another, usually as a result of many years of marriage. Usually the husband's perceived loss of control is heightened when either his or his wife's health begins to deteriorate. Even if his wife is not ill, depression combined with a perceived or real change in the husband's health can trigger the event. As a variation, when a husband experiences a sense of hopelessness as a result of the combination of depression, isolation, and multiple stressors, homicide-suicide may result.
- *Aggressive Homicide-Suicides* occur in about 30% of the cases. They usually follow a history of domestic violence, and are more common among couples in their 60s. The perpetrator, who is often much older than the victim, is usually provoked by separation, restraining orders, and threatening behavior.
- *Symbiotic Homicide-Suicides* occur in about 20% of the cases. In these instances, the husband and wife tend to be very old, highly dependent upon each other, and usually suffering from medical illnesses. The husband in general tends to be dominant, and the wife often has a submissive personality.

Although they are still relatively rare occurrences, homicide-suicides have a devastating effect on survivors. It is important to note that these acts are not impulsive. To the contrary, they are often well thought out for months, and sometimes years, in advance, thus, leaving ample time to intervene and prevent a tragedy. Survivors who later discover the extent of the prior planning are stricken with guilt for not having perceived the

intentions in time to prevent their being carried out. The key, of course, is to note the heightened degree of risk and any overt indications of intent.[54]

Despite the urgent need, research indicates a lack of effective programs to prevent elder suicide.[55] Crisis prevention programs (e.g., hotlines, community crisis centers) have been identified as one of the more effective prevention modalities to elder suicide due to their availability and easy access.[56] However, such programs are underutilized by the elderly. Novel programs that address the suicide risks in the elder population are needed. Suicide prevention strategies for the elderly cannot depend solely on programs that have worked for other population groups since such programs do not translate well to the special needs of the elderly.[57] Since 75% of elderly adults who commit suicide visit their physicians shortly before their deaths, it intuitively follows that prevention efforts must involve physicians in a primary role. Prevention efforts must meet elderly adults where they are most likely to be found—physicians' offices, senior centers, their homes—and by whom they are likely to come in contact with—family members, meals-on-wheels deliverers, home health care providers, companion visitors, and so on.

Correctional Settings (Prisoners and Jail Detainees)

Suicide in correctional settings has often been overlooked as a unique problem, in part because of its isolation from society. When discussing correctional settings suicide, it is essential to draw a distinction between jail and prison. Both the profiles of the respective populations and the circumstances of their confinement are different. Jail generally refers to a local detention facility (e.g., municipalities, counties) in which the "detainee" is held for a relatively short period of time awaiting bail, trial, and/or sentencing. Prisons are state or federal facilities that house "inmates" after they have been sentenced for a crime.

Jail detainees are entering the initial states of confinement and isolation from society. They are generally younger than prisoners, less hardened to an incarceree life-style, and more traumatized by their separation from society. Facing and adjusting to the arrest, jail environment, and uncertainty regarding their legal charges and future prospects are enormously distressing events that can constitute a crisis. Thus, jail populations historically have received more attention with regard to suicide research than prison settings. Research indicates that detainees have an annual suicide rate of 107 per 100,000 detainees. This is nine times higher than for the general population. Among detainees who died by suicide, a consistent demographic profile has been identified: [58]

- Young
- White
- Single
- Nonviolent offenders
- Intoxicated
- History of substance abuse
- Died by hanging using bed clothing
- Isolated jail housing
- Death within first 24 hours of arrest

Prisoners are usually older than detainees, have experience with incarceration, and are well aware of the legal and personal consequences of their situation. A national prison study that spanned 10 years revealed suicide rates that vary widely across states, ranging from 18.6 to 53.7 per 100,000. The overall estimated rate of suicide was 20.6 per 100,000, but a downward trend in rates across the 10 years was noted. In spite of this trend, the prison suicide rate is almost twice that of the general population, but significantly less than suicide rates in U.S.

jails.[59] The suicide rate among inmates in Florida has varied over the years, ranging from 4.51 per 100,000 in 1990, to 19.25 per 100,000 in 1994. In 2003, there were 6.30 suicides per 100,000 inmates, which is a decline from the 10.68 reported the previous year. For a breakdown of inmate suicide rates, see Appendix D.

Prisoners most likely to die by suicide have the following characteristics:[60]

- Significant mental illnesses
- History of suicide attempts
- Older age
- Lengthy sentences
- Institution problems involving protective custody and immigration status
- Segregated/isolated housing
- Single, divorced, separated, or never married

Protective factors are limited among these populations. They either do not have strong social support systems in the community (as inmates tend to be ostracized by friends and family left behind), or they do not utilize the supportive resources available to them. However, researchers are uncertain if this disrupted social support network is different for inmates who engage in suicidal behavior as compared to those who do not.[61]

Individuals with Mental Illnesses

Although a significant number of suicides are not related to mental illnesses, it is widely accepted that 90% of suicide victims have one or more psychiatric disorders at the time of suicide.[62] In spite of this high prevalence rate, half of the people who die by suicide have never seen a mental health professional, and up to two-thirds are not receiving treatment at the time of their death.[63] People with schizophrenia and affective disorders (including depression) have the highest suicide risk among those recently diagnosed, whereas, suicide risk for alcohol and drug dependent individuals remains fairly stable throughout the life of the disorder.[64]

Risk of suicide greatly increases with comorbidity. Many individuals with mental illnesses who die by suicide suffer from more than one psychiatric disorder.[65] Among those who make suicide attempts that require medical attention, two thirds experience four or more of the following risk factors: sociodemographic disadvantage, disadvantageous childhood experiences, personality disorder traits, psychiatry morbidity, and exposure to adverse life events.[66]

There are three sets of risk factors typically identified among those with mental illnesses that relate to suicidal behavior. First, suicide risk reflects the accumulation of years of adverse social influences. Research findings indicate a relationship between early parental loss, childhood sexual abuse, and other childhood trauma and suicidal behavior in adults to suicide.[67] Second, biological factors play a significant role in the occurrence of suicides. Patients who exhibit suicidal behavior have reduced levels of serotonin.[68] Impaired serotonergic functioning reduces the ability to resist impulses while increasing the likelihood for an individual to act on suicidal urges during times of stress or psychiatric illness.[69] Finally, as with most behaviors and illnesses, genetic factors exert significant influence. Twin and adoption studies suggest a genetic predisposition towards suicide independent of, or in addition to, psychiatric disorders. For example, twin studies show that monozygotic twins (who share 100% of their genes) have significantly higher suicide and attempted suicide rates than dizygotic twins (who share 50% of their genes).[70]

Individuals with certain mental illnesses are at greater risk of attempting suicide. The increased risk for these mental illnesses is described in detail below.

Depression. Depression is one of the most important risk factors for suicide with approximately one in six depressed patients killing themselves. [71] People with depression who die by suicide are most often middle-aged males. Depressed patients who abuse substances and do not comply with treatment are at an increased suicide risk. A medical diagnosis of depression occurs when five or more of the following symptoms are present during a 2-week period: [72]

- Depressed mood most of the day, nearly every day, as indicated by either subjective report or observations made by others
- Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day
- Significant weight loss when not dieting or weight gain (i.e., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day
- Insomnia or hypersomnia nearly every day
- Psychomotor agitation or retardation nearly every day (as observed by others in addition to subjective reports)
- Fatigue or loss of energy nearly every day
- Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not just guilt about being sick)
- Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)
- Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide

The suicidal course in depressed people is a slow, peculiar process. Most depressed people who kill themselves do not do so while experiencing their most severe symptoms. Recall from the list of symptoms above that psychomotor retardation, (i.e., lethargy, slow movements, and thought processes), loss of interest, and fatigue are symptoms of depression. They tend to increase in prevalence and severity as one's depression increases in severity. These symptoms greatly impair the ability to engage in not only pleasurable activities, but in any activities at all, including suicidal behaviors. Thus, severely depressed individuals are less likely to die by suicide because they are often too fatigued, weak, and apathetic to perform the act of suicide. Depressed individuals who kill themselves often do so when their symptoms have slightly lifted, particularly psychomotor retardation.[73] Thus, reduced levels of psychomotor retardation among depressed individuals may actually promote suicidal behaviors, meaning that at moments of apparent recovery, the risk of suicide is greater.[74]

Bipolar Disorder. Bipolar Disorder, frequently referred to as "manic-depression", is the experience of one or more major depressive episodes and one or more manic episodes. Symptoms of a manic episode include:[75]

- Inflated self-esteem or grandiosity
- Decreased need for sleep
- More talkative than usual or exhibiting pressure to keep talking
- Flight of ideas or sensation that thoughts are racing
- Distractibility
- Increase in goal-directed activity (socially, at school or work, or sexually) or psychomotor agitation

- Excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g., spending sprees, high risk sexual behavior)

Between 25% and 50% of bipolar patients attempt suicide at least once.[76] Bipolar patients are at an increased risk for suicide during mixed delusional and manic states. Similar to depressed patients, substance abuse and treatment noncompliance increase the risk of suicide among bipolar patients.[77]

People with Schizophrenia. Schizophrenia is a thought disorder characterized by a tendency to distort reality (e.g., hallucinations, delusions, disorganized thought processes, inability for speech to achieve its goal or purpose). Schizophrenia is believed to result from an imbalance of neurotransmitters in the brain. Approximately 1% of the population is diagnosed with schizophrenia, and 10% of them die by suicide.[78] Most take their lives themselves shortly after diagnosis, and are young, unmarried (75%) males who have previously attempted suicide (50%).[79]

The risk of suicide is greatest early in the course of schizophrenia; risk factors for suicidal behavior include psychosis, depression, and substance abuse. Very few kill themselves as a result of command hallucinations (e.g., hearing voices that tell an individual to commit suicide). One third of patients with schizophrenia die by suicide while hospitalized. As many as a third of suicide deaths among individuals with schizophrenia occur within the first weeks following discharge from a hospital.[80] Patients with schizophrenia are generally at their clearest, highest level of functioning upon discharge from psychiatric hospitalization. Theorists propose that many kill themselves during this time because the realization of the serious nature of their illness is often overwhelming for them.

Effectively treating positive symptoms and depression, reducing substance abuse, avoiding akathisia (a frequent adverse effect of treatment with antipsychotic medication), addressing demoralization, and instilling hope are important elements of this treatment approach. The newer generation of "atypical" anti-psychotic medications appears to be useful in reducing suicidality in schizophrenia.

Personality Disorders. Borderline personality disorder and antisocial personality disorder patients die by suicide at rates of 10% and 5% respectively.[81] Roughly 50% of psychiatric patients who attempt suicide have a personality disorder. The majority of suicides among personality-disordered patients are comorbid with depressive disorders, substance abuse disorders, or both.[82]

Post-Partum Disorders. Post-natal mood disorders range from mild "baby blues" which occur in up to 80 percent of all women in the first two weeks of the post-partum period to the most extreme "postpartum psychosis" which presents less frequently in less than one percent of women. Post-partum depression lies somewhere between the spectrum of mood disorders in the post-partum period and is present in up to twenty-five percent of all post-partum mothers. The debilitating effects of this disorder can involve the entire family unit. Such women are at high risk for recurrent depression.[83]

The symptoms of post-partum depression are usually exhibited within six weeks after birth. If left untreated, many of these women will still be suffering from depression one year after delivery. Women with post-partum depression often experience severe anxiety, panic attacks, spontaneous crying long after the usual duration of the "baby blues," disinterest in their infant, and insomnia."[84] Despite the serious consequences of prolonged post-partum depression and its amenity to treatment, the disorder remains unrecognized in the majority of women.

Risk factors for post-partum depression include: history of depression, premenstrual dysphoric disorder, age less than 19, limited social support, living alone, greater number of children, marital conflict, and ambivalence

about the pregnancy. A prior history of depression is the strongest indicator of future depression during or after the pregnancy.

Patient screening is the only way to determine if the mother is suffering from a post-partum disorder. The Edinburgh Post-Natal Depression Scale is a self-report instrument, filled out by the patient while she is waiting to be seen by the physician. It is scaled specifically to the post-partum period so that it avoids interpreting common post-partum changes such as poor appetite, fatigue, and change in sleep patterns as signs of depression.

The Edinburgh Post-Natal Depression Tool has been well validated and is now used in many countries.[85] Scores of at least 12 on the scale identified eighty-eight percent of women with major depression. Such recognition, particularly when accompanied by discussions with the patient, could prevent further complications of post-partum depression leading to infanticide and suicide. The rates of infanticide and suicide vary across the nation with higher risk areas noted in the inner city.[86] In one study, worrisome scores were seen in up to twenty percent of post-partum women, with five percent of these women having suicidal ideation.[87]

With such a diverse population among those with mental illnesses, intervention efforts will need to be multi-focused, attacking the issue from many different sides, utilizing a variety of methods. Intervention strategies should include reducing suicidal ideations and attempts, reducing clinical symptoms associated with suicide risk, reducing anger, aggression, and impulsivity, improving insight and treatment compliance, arranging community supports and continuity of care upon discharge, and educating physicians about recognition and assessment of depression and suicide risk.[88]

Significant advances in defining the neurological basis of suicidality may enable the development of more effective treatments. Renewed emphasis on resilience and recovery (and the concomitant sense of hope) hold promise for effectively reducing suicidality in people with mental illnesses. Advances in knowledge in recent years should translate into increasingly better outcomes.

Substance Abuse Disorders

The association between suicide and substance abuse has been well documented over the years. Additionally, the use of drugs and alcohol as a method of suicide has also been well established. Substance abuse disorders are involved in nearly 60% of all suicides.[89] Alcohol abuse alone is a factor in 25-43% of all suicides.[90]

Among the estimated 13.7 million alcoholics in the U.S., 2.2 to 3.4 percent are at risk for suicide for the duration of their lives.[91] The majority who die by suicide are men, and usually do so after years of alcoholism. A number of precipitating factors have been identified among people suffering from alcoholism who take their lives. These include:[92]

- Loss of a relationship
- Job trouble
- Financial difficulties
- Legal troubles
- Recent heavy drinking
- Presence of major depression
- Suicidal thoughts
- Poor social support
- Living alone
- Unemployment

Among these, the loss of a relationship several weeks before the suicide was the most common factor.[93] The risk for suicide increases as the number of precipitating factors increase, but as few as four of these risk factors are associated with heightened suicide risk for 80 percent of people suffering from alcoholism. In spite of the number of years of alcoholism or risk factors present, the single most important alcohol-related risk factor for nearly lethal suicide attempts is drinking within three hours of a suicide attempt.[94]

According to the National Institute of Drug Abuse (NIDA), there are approximately 4 million drug addicts in the U.S., of which 850,000 are heroin dependent. Heroin addicts die by suicide 20 times more frequently than the general population.[95] Risk factors that increase the likelihood of suicide among drug dependent individuals are: availability of lethal amounts of drugs, intravenous use, antisocial personality disorders, chaotic lifestyle, comorbid depression, and impulsivity.

Substance abuse is a multi-faceted risk factor for suicide because it contributes to other significant suicide risk factors, thereby further complicating the suicide issue by making it more difficult to identify the most salient risk factors. In addition to its direct relationship with suicide, substance abuse also causes suicide via a number of indirect paths. Substance abuse exacerbates the presence of psychiatric disorders and is associated with a host of dangerous behaviors (e.g., needle sharing, accidents, overdoses, impulsivity, etc.) that may be considered passive suicide attempts. [96] Often these behaviors are erroneously classified as accidents. Perhaps of most importance, is the tendency for individuals with substance abuse disorders to lose significant relationships with loved ones and social support systems that serve as salient protective factors against suicide.

Substance abuse and suicide have a complex relationship. Substance abuse plays a significant role in suicides and suicide is a salient issue among people with substance abuse disorders.[97] However, these relationships seem to be frequently overlooked. In light of the evidence presented above, it is beneficial for suicide preventionists and substance abuse preventionists to combine efforts to combat these related, and devastating threats to the well being of the individual.

Indigents

It has been clearly established that from one-third to two-thirds of homeless individuals experience mental illnesses.[98] Yet, few researchers have examined the relationship between suicidality and homelessness and those that have fail to control for mental illnesses.[99] This makes it very difficult to discern independent factors contributing to suicide.[100] One study surveyed homeless adults across 178 cities.[101] Over 26% of homeless single women and almost 21% of homeless single men in this study had made previous suicide attempts.

Steady employment appears to be a protective factor against suicide.[102] Rates for suicide attempts and completed suicides are consistently higher among those who are unemployed.[103] Although suicide rates tend to be high among the unemployed, other factors that contribute to both unemployment and suicidality such as psychiatric disturbances, are substantial mediators.[104]

Homeless adolescents and runaway youth have a greater propensity to attempt suicide than their counterparts. Risk factors that increase suicide attempts among homeless and runaway youth include higher incidences of low self-esteem, depression, physical abuse, sexual abuse, and knowing a friend who attempted suicide.[105] Homeless and runaway youth who experience one or more of these risk factors have a greater likelihood of attempting suicide. [106] In the main, further research is needed if we are to fully understand the relationship between suicide and homelessness.

Uniformed, Armed Professions

There is a generally held view that people who work in fields where they are subject to high stress, personal danger, are routinely armed with or in close proximity to firearms, and who may be called on to take another's life in the performance of their duties are more prone to suicide than the population at large. Whether or not this view is accurate is subject to debate, but the effort that has been put into its study and to its prevention is instructive and worth noting.

Indeed, the first systemic study of suicide was done by Emile Durkheim (1897) and focused on the sociological setting of the French Army, particularly on its officers corps. The impact of the study went well beyond a greater understanding of suicide to become a pioneering document in the development of the field of social sciences. Durkheim established that suicide is largely affected by social and economic change, social integration (attachment to social groups), and social regulation (a spirit of discipline). He concluded that suicide is the extreme consequence of the constraining implications of a lowered level of social bonding. The greater the experience of social integration and social regulation, the lower the suicide rates.

While Durkheim's work has withstood the test of time, current statistics on U.S. military personnel do not indicate a higher incidence of suicide, with the possible exception of three subgroups — those in entry (i.e., "basic") training, those actually involved in war and combat, and veterans. Law enforcement officers, on the other hand, may experience a suicide rate estimated at two to three times that of the general population.[107] However, research in this area has been inconsistent, yielding highly variable results due to methodological weakness such as small sample size. The net results are inconclusive.

Nonetheless, there are useful insights that can be gained by systemic study and resulting pilot suicide prevention programs within large, organized, and (presumably) regimented populations. Such groups lend themselves to both risk and protective factors, sometimes at the extreme end of the spectrum. A recent approach fostered by U.S. Air Force leadership and carried out with the weight of authority down through the chain of command has had dramatic effect on reducing its institutional suicide rate. That approach is discussed in greater detail in Appendix E.

People with Chronic Medical Illnesses

Overall, there is little evidence that indicates medical illnesses as a sole determinant of suicide.[108] Contrary to popular belief, chronic illness is not a significant risk factor of suicide among the elderly. Two-thirds of elderly adults are in relatively good physical health at the time of suicide.[109] However, some medical illnesses are associated with suicide rates that exceed those of the general population.[110] Thus, the initial diagnosis and the chronic symptoms associate with these illnesses may place one at substantial risk for suicide.[111] Table 2 illustrates the medical conditions that are most and least associated with suicide. Many of the conditions most related to suicide, are also associated with an increased risk for developing depression.[112]

Table 2. Relative risk of suicide in different medical conditions and illnesses

Reduced Risk	No Increased Risk	Unclear Risk	Elevated Risk
Pregnancy	Neoplasms; Cervix, Prostate	Amputation	Brain cancers
	Heart transplant	Parkinson's Disease	HIV/AIDS
	Hypertension	Peptic Ulcers	Multiple Sclerosis
	Rheumatoid Arthritis	Spinal injuries	
	Amyotrophic lateral sclerosis		
	Diabetes, juvenile and late onset		

Note: Data taken from Harris & Barraclough (1994) and Stenager & Stenager (1992). [113]

Such findings indicated need for medical professionals to be well prepared for recognizing depression and suicide ideation in their patients.

Survivors

The term "survivors" refers to family members and close friends who are left behind following the death of a loved one by suicide. Exact survivor rates are unknown, but conservative estimates suggest there are at least 4.4 million survivors in the US.[114] The death of a family member is one of the most substantial life stressors any individual can endure. It is widely accepted among scientists, therapists, and the public that suicide causes a particularly troublesome and lengthy grieving period.[115] There has been limited research focused on grief after a loss by suicide. In fact, the majority of grief/bereavement research limits its focus to natural deaths, prolonged illness, or old age in spite of the fact that sudden death (e.g., death that occurs without warning, anticipation, or preparation) such as accidental death, suicides, homicides, and unanticipated natural deaths (e.g., heart attacks) are among the leading causes of death in the U.S. [116] In light of these limitations, the focus here will be to provide an overview of the theories that postulate a deeper grief among suicide survivors.

In addition to an overwhelming sadness, feelings of guilt, blame, responsibility, abandonment, rejection, and anger are often experienced among suicide survivors. Moreover, they tend to perceive that others harbor negative attitudes toward them, somehow holding them responsible for the loved one's death.[117] Furthermore, suicide survivors tend to experience factors that predispose them to suicidal behavior since the families of suicide victims are often affected by conflictual relationships as well as mental health and substance use issues.[118] Additionally, the death of a loved one by suicide may suggest to survivors a way to cope with their own adversity. Suicide may be an option that is never considered until a family member exhibits the behavior, thereby modeling what grieving and distraught survivors see as a valid option. Modeling — the tendency for people to learn by observing others in action — is a salient factor in how behaviors are learned and maintained.[119]

Suicide survivors may have a tendency to hide their grief as they struggle to understand why their loved one ended his or her life. Survivors often do not receive the degree of understanding from support networks they need, and tend to blame someone (often themselves) other than the victim for the death.[120] Few studies substantiate the belief, however, that suicide survivors grieve profoundly longer and more painfully than other survivors. Nonetheless, it is clear that suicide survivors experience an extensive reaction that is inclined to forever change their lives.

Sexual Orientation

No official statistics exist with regard to suicide rates among gay, lesbian, or bisexual individuals. Sexual orientation is not recorded on death certificates, and since most people do not, as a matter of course, disclose their sexual orientation, psychological autopsies frequently miss such information. In spite of these limitations to data collection, one directed study suggests that gay, lesbian, and bisexual youth comprise a significant percentage of teen suicides.[121]

While these data have not been confirmed, other research has indicated that gays, lesbians, and bisexuals are at least twice as likely to engage in suicidal behaviors as their heterosexual counterparts.[122] Young males in this group have a well-substantiated, high rate of nonfatal suicidal behavior.[123] Many of the risk factors identified earlier are present. These can be further exacerbated by rejection, and isolation from social support groups, particularly the family.[124] Parental reactions, particularly those marked by rejection and intolerance, are associated with more suicide attempts.[125]

Conclusion

What this chapter documents is the widespread presence of risk factors throughout the population in general and their particular prevalence among some specific subsets of the population. It also suggests that there are protective factors that can be strengthened to mitigate those risks. It is only by understanding the phenomenon of suicide in relationship to its ideation and realization among different subgroups that we can hope to address its particular – and, therefore, in the end it's overall – impact.

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CHAPTER THREE: Goals and Objectives

This chapter identifies the major goals and the supporting objectives that will allow us to meet our desired outcome of appreciably decreasing the suicide rate in Florida. Moreover, we seek not merely a momentary dip in the incidence of suicide. We plan to bring the per capita rate down and keep it that way. As the current incidence of suicide has held steady for decades, we aim to break through what appears to be an inexplicable floor in order to suppress the rate of suicide to where it has not been for a century.

Goals

In keeping with the approach outlined in the Policy Paper (*Preventing Suicide in Florida*, September 2002), we set three broad goals:

GOAL 1: Decrease the incidence of suicide in Florida by one third by the end of 2010.*

GOAL 2: Decrease the incidence of teen suicide in Florida by one third by the end of 2010.

GOAL 3: Decrease the incidence of elder suicide in Florida by one third by the end of 2010. **

In a perfect world, we would set as our goal the elimination of all suicides. We do not live in a perfect world, however, and human psychology and interaction being what they are, we can, sadly, expect that there will always be some who -- for whatever reason -- see no alternative but to take their own life. Therefore, no matter how determined and resourceful we may be in our planning and policies, we would delude ourselves if we thought we could eliminate suicide once and for all. But just as clearly as we see that we cannot eliminate suicide from the human experience, we can deduce that there is no predetermined reason -- nor collection of reasons -- that dictate acceptance of the current high rate of suicide. In the past ten years over 300,000 Americans died by their own hand. Undoubtedly, many of these were preventable.

If we are to succeed with these three goals, we must achieve significant reductions among groups that evidence the greatest incidence of suicide, for example--adult males. But success in lowering the overall suicide rate would be incomplete if it did not include similar rate decreases among our most cherished human resource, children, and among the group that suffers by far the greatest incidence of suicide, the elderly. We, therefore, aim to achieve at least a one-third reduction amongst all three population groups.

In the past decade, the suicide rate among adolescents has declined by 25%, most likely an outcome of better treatment modalities for depression and anxiety. On the other hand, since the 1950s, the number of suicides among 15-24 year-olds tripled. We have to ask ourselves, why is that so? This is not a communicable disease we are talking about, (although there are instances of "suicide contagion"--see Chapter 2) but a human activity, an act of violence against the very person committing the act. At a time in our history when we are rightly concerned about an HIV/AIDS epidemic that is claiming unacceptably high numbers of American lives, the sad fact is that we are undergoing a suicide epidemic that is killing more than twice as many people as does HIV/AIDS.

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* While goals 2 and 3 focus on specific subsets of the population, goal 1 targets the populations as a whole. To achieve this goal, we must target a variety of subsets, especially these that contain the highest incidence of suicide.

** Elder is defined as individuals age 65 and over.

Such realities are obscured from those most vulnerable to their toll. Suicide receives little publicity and by and large is ignored as an issue by those not yet affected by it. Therein lies the rub. Only when suicide is manifest on a personal level does the shocking reality get driven home. By then, it may be too late.

Objectives

We, therefore, recognize the need for specific objectives necessary to enable us to reach our goals. They are:

OBJECTIVE 1: Raise awareness and disseminate information about the risk factors and warning signs associated with suicide.

OBJECTIVE 2: Overcome the reluctance to talk about suicide as a major debilitating social phenomenon.

OBJECTIVE 3: Debunk myths about suicide that lead to greater risk of suicide or hinder its prevention.

OBJECTIVE 4: Implement prevention, intervention, and treatment activities that are effective in prevention of suicide and suicide attempts

OBJECTIVE 5: Expand accessibility to substance abuse and mental health treatment.

OBJECTIVE 6: Mitigate risk among potential suicides by reducing access to lethal means.

OBJECTIVE 7: Provide training to gatekeepers and first responders on intervention skills in threatening situations.

OBJECTIVE 8: Implement screening systems to help identify those at risk for suicide.

OBJECTIVE 9: Support research for improved prevention and treatment modalities.

OBJECTIVE 10: Develop broad-based support for suicide prevention.

Performance Measures

The mere setting of goals and objectives will not bring Florida closer to the ultimate reduction of suicide without a system in place to measure progress. Since there are multiple factors that can affect a strategy, it is essential that a comprehensive evaluation component be in place to facilitate course corrections along the way. Ultimately, such performance measures will guide us to find the most successful ways to address suicide and reduce the devastating effect that losing over 2,000 people a year has on Florida's families. In order to be consistent across age cohorts, the suicide rates for 2001 will be used as a baseline. Our targets are:

- To decrease the incidence of suicide in Florida from 14.1 per 100,000 in 2001 to not more than 9.4 per 100,000 in 2010
- To decrease the incidence of Florida youth suicides (ages 15-24) from 9.5 per 100,000 in 2001 to not more than 6.3 per 100,000 in 2010.
- To decrease the incidence of suicide among adult (ages 25-64) Florida residents from 18.4 per 100,000 to not more than 12.3 per 100,000 in 2010.
- To decrease the incidence of elder (ages 65+) suicide in Florida from 20.0 in 2001 to not more than 13.3 in 2010:

Limitations to Gathering Accurate Data

Suicide is a taboo subject, one that is frightening to contemplate both before and after the event. Feelings of shame, isolation, fear, hopelessness, and helplessness are often associated with suicide both for victim and

survivors. Unfortunately, many people take the approach that if they ignore this tragic issue, it will not touch them. Research clearly indicates that the exact opposite is true. The suicide rate has increased significantly during the course of the 20th century (300% since the 1960s among adolescents alone), such that suicide is now the third leading cause of death among adolescents.[1] Although, the suicide rates at the state and national levels clearly illustrate the urgent need to address suicide, many people fail to recognize suicide as something that could affect them personally.

Gathering data about suicidal behaviors (e.g., attempts, ideation, etc.) is a complex process. One major limitation to accurate data collection stems from a lack of cognition and support in the community. Suicide prevention must encompass the full cooperation of every contributing member of a community. Without the complete support of "gatekeepers" (e.g., parents, teachers, law enforcement officers, fire fighters, small business owners, health care providers and community leaders) accurate data gathering will be neither practical nor feasible.

A second limitation to accurate data gathering concerns the issue of under-, mis-, and un-reported suicides and suicide attempts. It is often difficult for medical examiners to discern whether a death was intentional or not due to inadequate information on which to determine suicide as the cause of death, examiner error or bias, or lack of information due to an un-recovered body (e.g., following a drowning or jumping from a bridge).[2] Even if the medical examiner suspects suicide, he/she may list the official cause of death as "unintentional or accidental" due to a concern for the sensitivities of (or pressure from) the family of the deceased not to attach what is seen as a stigmatizing label to the death of a loved one. In the face of such potentially inaccurate data, ascertaining the true number of suicides and suicide attempts is problematic and subsequent analyses comparatively imperfect.

Measurement Tools

In order to gauge our progress, it is imperative that Florida implement solid measurement systems. In the past, death rates have been the only tool for measurement. Regrettably, death rates do not address the entire issue of suicide. It is crucial to measure death rates, but also suicidal ideation, attempts, and the risk and protective factors associated with suicide. Such measurement must be germane to the population at large as well as to specific subsets.

Fortunately, there are systems already in place to measure youth behaviors that can be easily adapted to meet the state's measurement needs as they relate to suicide. On a national level, the Centers for Disease Control conducts the Youth Risk Behavior Surveillance (YRBS), a school-based survey that assesses how often youth participate in a variety of risky behaviors. Florida has five sites as of mid-2004 (Orange County, Hillsborough County, Palm Beach, Ft. Lauderdale, and Miami) that participate in this survey. One section on the survey asks youth about hopelessness, suicidal ideation and suicide attempts. According to the 2003 YRBS results, 15.8% of Florida's youth seriously considered suicide compared to 16.9% of the nation's youth. Nationwide, 8.5% of the students surveyed attempted suicide in contrast to 9% of Florida's youth. Using these numbers as a baseline provides Florida with a more accurate picture of youth suicidal ideations and attempts.

In addition to the results available from the YRBS, the Florida Office of Drug Control in conjunction with the Florida Department of Children and Families, the Florida Department of Education, and the Florida Department of Health, conducts the Florida Youth Substance Abuse Survey (FYSAS) on an annual basis statewide. Since suicide and substance abuse share many of the same risk and protective factors, we will review the survey to determine if it can be modified to include questions about suicidal ideation in order to study the risk and protective factors related to suicide, and to look more in depth at youth cognitions about suicide.

Monitoring the progress of Florida's Suicide Prevention Strategy among adults presents a far more formidable challenge. Measurement tools to gauge adult suicidal ideation, attempts, and the risk and protective factors related to adult suicides are limited. At a national level, one study was conducted in 1994, using a random-digit dialed telephone survey.[3] The accuracy of such studies is questionable. Other measurement and screening tools are available, but finding an appropriate sampling of adults is difficult and expensive. Using results from psychological autopsies may provide some initial information about the risk and protective factors associated with adult suicides, but a more accurate measurement tool is needed. Psychological autopsies are described in greater detail in Chapter Four. Appendix F provides an outline for the collection of data to include adult suicidal ideation and attempts.

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CHAPTER FOUR: Policies and Programs

The preceding chapter detailed the strategy's goals, objectives and desired outcomes. This chapter delineates how we will achieve them. Whereas the goals and objectives specify what is to be accomplished, policy must determine how. This chapter, therefore, establishes policy by directing what suicide prevention programs the state of Florida will support and initiate. The following pages identify the core elements of Florida's long-term strategy to reduce its rates of suicide.

The antecedents of the programs mentioned below stem from the Policy Paper: *Preventing Suicide in Florida*, published in September of 2002. That document was the result of two years of effort undertaken by the Governor's Suicide Prevention Task Force, a group consisting of survivors, medical experts and government officials who had reviewed prior official and grassroots efforts in the state of Florida and integrated them to formulate policy direction. Since the publication of the Policy Paper, the task force has continued its work to further develop and implement appropriate policies, plans, and programs that will bring to fruition the desired end of appreciably lowered suicide rates. What follows are the core elements of a strategy to lower and keep suppressed the rate of suicide in Florida.

State Organization and Structure

Suicide is pervasive. No part of our social structure is immune from it. While incidences of suicide appear to be more prevalent in certain segments of the population, the understanding that it strikes without regard to locality, socio-economic status, ethnicity, religious preference, or age leads us to construct a strategy that is comprehensive, integrated, and multi-disciplinary in its scope and purpose. No single solution, no single model will suffice in enabling us to meet our goals. What is needed is a long-term effort that both raises awareness and directs coordinated programs as an integrated whole.

Suicide prevention must be a partnership between government and citizen interest groups that can jointly collate and disseminate information in a timely manner, train and field qualified responders, and direct services to those at risk. Resources by themselves are not sufficient. If we are to maximize the outcomes, Florida will need an infrastructure that combines resources with organization and leadership.

While much, perhaps most, of the impetus for leadership and support for suicide prevention will come at the local level, it must be coordinated and assisted from a central point at state level. For years prior to the establishment of the Governor's Suicide Prevention Task Force in 2000, several state agencies (e.g., Health, Education, Children and Families, Elder Affairs, etc.) had developed their own programs. The lack of central direction, however, resulted in multiple stove-piped efforts that seldom came together to reinforce each other. The results were repetition in some areas, lack of effectiveness in others, missed opportunities for information dissemination, and no central responsibility for results achieved. Working through challenges across geographic and agency boundaries was problematic at best. Not surprisingly, those at risk often fell through the cracks as they moved from one jurisdiction to another. Grassroots organizations were similarly isolated and hard pressed to identify where they could turn for integrated support.

To some degree, these shortfalls were addressed by instituting a statewide task force. Its chairmanship was centered in the Office of Drug Control, due in large part to the recognition of the high correlation between substance abuse and suicide. Other factors, such as personality, centrality, and linkages to grassroots prevention

coalitions also contributed to that decision. But suicide is not limited to those involved with substance abuse, and its pervasive threat necessitates a more permanent oversight and direction than a task force can bring to it.

Accordingly, in order to ensure suicide prevention remains a priority in Florida, it is crucial that a state infrastructure be in place to support the sustainable reduction of suicide. It is proposed that a Statewide Office for Suicide Prevention be formed to coordinate the state's suicide prevention efforts. The Office, in conjunction with the current Suicide Prevention Task Force or some successor body, would oversee the planning, resourcing, implementation, and evaluation of suicide prevention initiatives across the state. Each state agency would retain its own specific responsibilities and infrastructure pertaining to suicide and related matters, but their combined efforts would be coordinated by a central office.

Currently, the suicide prevention effort is overseen and maintained by the Florida Office of Drug Control and will continue to be housed as an initiative within that office until otherwise directed by the Governor. As the suicide prevention effort expands, so will the need for resources to support the initiative. Future implementation of this strategy will require a base to oversee an awareness campaign, review current research, coordinate state agencies and grassroots organizations, advise in the procurement of funding (i.e., public and private grants, state budgets, etc.) for prevention efforts, disseminate information about suicide and raise awareness through conferences and training events.

While centralized structure is necessary to integrate statewide effort, help procure federal assistance, and provide unified direction, success in suicide prevention depends on empowerment at the local levels. Florida was able to reverse youth substance abuse trends for the better once it expanded grass roots efforts throughout its 67 counties. So too will expansion of grass roots efforts interconnected by a network of shared information, mutual support, and reinforcing activities, serve as a first line of defense against suicide. Local control of solutions to the challenges posed by the threat of suicide is the best way to achieve overall success. To the extent that the state can nurture, interconnect, and support local coalitions, we shall do so.

Public Awareness and Information:

One of the key findings related to suicide prevention is the dearth of public discussion of suicide as a major social phenomenon and, consequently, the lack of information on how to recognize its attendant risks and mitigate its prevalence. As stated in the 2002 Policy Paper, "…suicide has become the ignored epidemic of our time."[1]

As a matter of public conversation, suicide seems to be the last taboo. Virtually no other subject is as noteworthy for the silence it gets, and certainly no other subject as widespread with such alarming and consequential impact. On a typical day, the media will describe the horror of homicides, the spread of AIDS, an outbreak of Mad Cow Disease, or a death due to the West Nile Virus. In between news reports, commercials proclaim the latest prescription drug to lower blood pressure, improve cholesterol or enhance sexual activity, the newest low-carb menu diet or a reminder to drink milk, exercise and live life in balance. Suicide, a major killer, gets virtually no mention. It is seldom a matter of either public or private discussion.

The National Strategy for Suicide Prevention recommends that one of the primary strategies for preventing suicide is to increase the public's awareness of the problem and the ways it can be prevented. It states that the stronger and broader the support for suicide prevention as a public health initiative, the greater its chances for success. But support will not come if people are not aware of the problem. And prevention will not follow if people do not recognize the signals and know how to respond. In these matters, silence hurts.

There are three issues that inadvertently prevent widespread discussion of this very public problem:

- A persistent social stigma associated with mental illnesses and substance abuse in general and suicide in particular
- A failure to recognize and a reluctance to react to the risk factors and signals that indicate a higher probability of suicidal behavior
- A lack of knowledge on when and how to follow through in the face of a perceived threat of suicidal tendencies

In order to successfully address these issues and consequently prevent suicide, a threefold approach to a public information campaign is needed that would:

- Change public attitudes by reducing the stigma associated with mental illnesses and suicide
- Increase knowledge about the risk factors and warning signs associated with suicide
- Teach intervention skills (such as calling 1-800-Suicide for help)

Reducing Stigma

Over the course of any given year, more than 54 million Americans are affected by one or more mental disorders. Despite such prevalence, social stigma remains associated with mental disorders and the issue of suicide. Just as with all human organs, the brain can be, and often is, vulnerable to disease. Nonetheless, instead of receiving compassion and acceptance, people with mental illnesses may experience hostility, discrimination, and resentment. Moreover, when someone attempts or completes an act of suicide, family, friends and neighbors tend to be overwhelmed by feelings of grief, confusion, and guilt. These emotions combine to hinder the survivors and others from talking about the prevalence of suicide and becoming actively involved in awareness efforts. Thus, social stigma, grief, and feelings of guilt combine to hinder both the awareness of and response to the threat of suicide and to share lessons learned with the larger community.

Changing perceptions and eliminating barriers must become priorities of a public-private partnership that seeks to lower the suicide rate. Clear articulation of the issue is a legitimate need for health policy in particular and public policy in general. The identification of the often linked, but not universal, juxtaposition of mental health issues and suicidal tendencies, and concerted efforts to obviate blame to those suffering from mental illnesses and associated suicidal ideations (and attempts) to their family and social contacts must be part of any public awareness campaign.

Improving Public Knowledge

One of the more effective ways to lessen stigmatization is to share accurate information on the phenomenon of suicide. Statistics revealing trends, patterns, risk factors and warning signs related to suicide are essential for components of public knowledge. Understanding the breadth and depth of suicide ideation and correlated risk factors (such as mental illnesses, substance abuse, life-upsetting disturbances, physical health, crisis, the aging process, etc.) tend not only to reduce stigma, but also serve to highlight risk factors and alert family and others to the need for preventative steps. In short, accurate and open discussion of the nature of the problem by public officials, committed advocacy groups and grassroots organizations will go a long way toward making suicide a better understood and, ultimately, a more preventable event.

Teaching Intervention Skills

Information alone will not suffice to empower those with the potential to act. They will also need the tools to respond to a recognizable threat. Intervention skills, such as knowing to dial 1-800-Suicide and how to obtain treatment for those in need, are critical.

Not all of these skills are necessarily difficult to master. Consider how we teach fire safety to children. We inculcate in them a 3-step emergency response: Stop, Drop, and Roll. We repeat it often enough so that appropriate steps become rote. The aim is to make the appropriate responses come automatically especially in an emergency, when it counts the most. In keeping with this concept, "Gatekeeper Training" teaches an effective 3-step approach to intervene with a person contemplating suicide:

- Show you care;
- Ask the question, "Are you thinking about suicide?"
- Get help.

The point is, any public awareness effort must include in it basic response actions that are easily remembered so as to be automatically acted upon when a bona fide danger is recognized.

Social Marketing

Public awareness by itself, however, is only the first step toward resolution of both stigma and ignorance surrounding suicide. A marketing approach must be developed in tandem with public discussion of the issue. Health educators tend to focus on providing information to the general public about particular topics, with the hope that people in need will recognize its applicability to them and alter their behavior accordingly. Social marketers, however, understand that effective outcomes must involve more than supplying information and hoping for a behavior and/or attitude change. Focused research identifies target audiences and in response, the marketers disseminate reinforcing messages and actively engage the target audiences with the issue.

The idea is to change not only the knowledge base, but attitudes and behaviors as well. This means involving the target population and developing specific messages for all stakeholders tied to the target population. Among the key stakeholder groups that should be addressed as part of a suicide prevention public awareness plan are:

- At risk individuals
- Parents / Children
- Peers / Co-Workers
- Mentors
- Teachers
- School Administrators
- County School Board Members
- Guidance Counselors
- Local Mental Health Community
- Major Health Insurance Providers
- Physicians; Public and Private Health Officials
- Health Care Providers
- Emergency Room Personnel / Emergency Medical Technicians
- Law Enforcement and Judicial System Officials
- Faith Based Community
- Community Centers and Coalition Groups
- Senior Center Staff

By reaching not only those at risk of suicide, but also those who come in contact with them on a daily basis, the probability of reduction of suicide rates is greatly improved. In essence, informing the public and asking them to take directed action provides a safety net for those who are in danger.

Campaign Components

Suicide prevention presents a particularly thorny challenge for a public media campaign. A taboo subject to begin with, it also presents the risk that by drawing attention to suicide, it may inspire some to attempt it. However, a well-crafted media campaign can avoid such pitfalls, overcome the reluctance to identify suicide as a major phenomenon, and bring the necessary protective factors into play. Therefore, what follows in this section is a detailed outline of the necessary components of an effective media campaign.

A successful social marketing program must engage key audiences with the right message. A comprehensive, research-based and integrated campaign that features a continuum of communication methods and outlets including public service announcements, public events, educational materials, speakers' bureau presentations, peer-to-peer efforts, and earned media promises the best returns on invested efforts. The campaign should include both mass media messages and community-focused, peer-to-peer messages. Such integration can create both a synergy and credibility that maximizes intended outcomes. An effective public awareness campaign would include the following steps.

Step 1: Planning

The planning phase forms the foundation on which the rest of the process is built. To create an effective social marketing program, it is critical to understand the issue from the perspective of the target audience and assess the environment in which the program will operate. A significant amount of research already done can help to confirm. Of particular interest are the models and results of other suicide prevention efforts such as:

- Washington State, Wisconsin and Pennsylvania's media plans/materials and tools
- The Air Force's Suicide Prevention Program
- The efforts of Suicide Prevention Action Network and the Suicide Prevention Resource Center
- National Institute of Mental Health's "Real Men, Real Depression" campaign
- The Eliminating Barriers Initiative

In addition to these studies, it is essential to receive input through surveys, interviews and focus groups to know how best to reach the target population.

Step 2: Message and Material Development

This phase uses the information gathered in the planning phase to design the messages to be conveyed, as well as the materials that will carry the messages to the target audience.

- Develop strategic communications messages that are both consistent and compelling;
- Develop community-wide alliances that will provide the opportunity to deliver these messages through the most appropriate channels (television, radio, print, out of home, churches, schools, etc.);
- Develop and implement a comprehensive plan that incorporates a variety of tactics including:
    - Foundational work:

  - Collateral development
  - Media training
  - Develop website
  - Develop media kit and materials
- A statewide print, outdoor advertising, television and radio public service announcement campaign
- Youth outreach including peer-to-peer communication programs (such as working with school-based media in-school TV stations, student newspapers, working with school clubs, etc.); and developing peer-to-peer marketing messages
- A public relations campaign (earned media)
- A speaker's bureau plan (churches, business and charitable organizations, mentoring organizations, Parent Teacher Associations, sports coaches, etc.)
- A website that includes real-time, instant message counseling services
- Grassroots efforts coordinated with marketing efforts
- Public event tied to National Suicide Prevention Week
- Access to suicide prevention resources
- Posters, cards and other creative media pieces to carry the message to especially high-risk areas
- Educational Conferences

The key to the success of the program will lie in the ability to create a significant degree of synergy between the combined efforts of all communications efforts, and in the capacity to transcend one-way messages to create a community dialogue about the issue.

Step 3: Pre-testing

Pre-testing is vital to message refinement for effectiveness. Normally, an iterative process of pre-testing and message modification results in the best final product.

Step 4: Implementation

The campaign should be introduced to various target audience(s) in a strategic sequence and timeframe.

Step 5: Evaluation

Evaluation must extend beyond the social marketing campaign. The overall evaluation will assess the effects of the program as a whole as well as the individual elements of the strategy in measuring recognition, comprehension, attitudinal change and behavioral outcomes.

Education and Training

As much as public awareness is key, education and training of those charged with responding to potential risks is imperative to completing the cycle of awareness, empowerment and resolution. If all we did was heighten the knowledge base of families (or caregivers) of individuals at greater risk for suicide without both broadening and deepening the capacity for a responsive system, the problem would only be half addressed. Lay people (e.g., parents, spouses, siblings, teachers, faith-based leaders, supervisors, co-workers, etc.) and professionals alike must be taught how to respond effectively to the threat of a suicide.

Some departments, such as the Department of Juvenile Justice, provide and mandate education and training for the direct care staff. For example, juvenile probation officers, correctional officers, and detention officers all receive between seven and eleven hours of suicide prevention training upon hire. The content of the education and training includes risk factors for suicide, warning signs, behavioral changes by individuals contemplating suicide, mental disorders associated with suicidal behaviors, and suicide prevention intervention techniques. On-line training for non-state employed direct care staff on suicide detention and prevention is provided at no cost.

Gatekeeper Training

According to a recent study, more than one in five adults believe that "…when someone has decided to commit suicide, nothing can be done to stop it."[2] Through research, we know that this is not true. The persons most likely to prevent a suicide are those closest to the individual who is contemplating suicide. Those with whom the at-risk person is most often in contact, as well as those who love and care for him or her are in a position to see the warning signs and act upon them, if they have been trained to be proper training. Gatekeeper training equips them with the skills to recognize the warning signs of suicide and then follow three easy steps: Show they care; Ask the question, "Are you thinking about suicide?", Get help.

The Florida Department of Elder Affairs and the Area Agencies on Aging from across the state have undergone the Gatekeeper training. During 2004, more than 120 seniors were given training as well as 290 staff members who in turn trained others in their local community. Through innovative efforts like this, Florida is building a cadre of citizens prepared to recognize a person in crisis, respond appropriately and refer them to appropriate help.

In the absence of family recognition or family support, the eyes and ears of those with whom the potential suicide victim comes into contact with are vital to preventing a fatal follow-through. In the case of children, this may very well be a teacher or a peer who sees the child on a daily basis and who note changes in demeanor, ideation and intentions. In the case of elders, it could be individuals who have frequent contact (e.g., postal workers, home maintenance services, meals-on-wheels deliverers, etc.) or bona fide caregivers (e.g., nursing staff, senior citizen centers, etc.). Educating gatekeepers to recognize signs and provide the means to follow up with intervention services could make all the difference in the world.

School and community gatekeeper training has shown to be very effective. As early as 1992, the Centers for Disease Control and Prevention outlined eight strategies for suicide prevention as part of an effort to develop a resource guide comprised of "best practices." Of these strategies, school gatekeeper training and community gatekeeper training are highlighted by several studies that support their efficacy.[3] Evidence from these studies suggests those trained as community gatekeepers make positive gains in knowledge about suicide warning signs, intervention strategies, and referral sources. Other data shows that adult populations demonstrate positive gains in techniques of suicide risk assessment as a result of gatekeeper training.[4] Similarly, the efficacy of youth gatekeeper training has been confirmed through analysis of post-training data. Results show that knowledge, skill, and positive attitudes about suicide awareness increase significantly after gatekeeper training, suggesting that training provides gatekeepers with the tools and strategies necessary for effective intervention. In Florida, the Florida Suicide Prevention Gatekeeper Training Program is the most common Gatekeeper program.[5]

First Responders and Crisis Intervention Training

In the course of their normal duties, law enforcement officials, emergency medical technicians, fire fighters and other authorities charged with the responsibility of responding to crisis-laden events are liable to come in contact with a suicide-prone individual. Sometimes the potential victims are explicit in making known

their intention to kill themselves, such as the jumper poised at the railing of a bridge threatening to hurl himself over the edge. At other times, they are less obvious in their intentions, electing instead to invite by their own threatening actions a response that could prove fatal to them — the so-called "suicide-by-cop" syndrome that deceptively provokes a life- threatening reaction.

Crisis intervention training, a formalized course of instruction that teaches the first responder to recognize the signs of suicidal intent and develop courses of action for dealing with it in on the spot, has proven to be an important prevention step. Often, the first few moments of crisis response can be crucial in determining the sequence of events that follow. Anthony Schembri, the Secretary of Florida's Department of Juvenile Justice tells the story of his experience as a young law enforcement officer being confronted by a citizen asking directions to the roof of the building in which Schembri worked. When asked why he wanted to go there, the citizen replied, "Why, to jump off." In a smooth series of diversionary steps, Schembri convinced him he needed an authorization to go to the roof for that purpose, had him fill out the forms, then waited for the patrol car that would transport him to the office that could grant final approval (which, of course, happened to be located in a nearby psychiatric evaluation ward).

The story may be apocryphal, but it makes the case of how basic skill sets enable crisis interventions that both divert and resolve situations that could otherwise be extremely volatile. Crisis Intervention Team Training (CIT) teaches suicide prevention techniques and effective communication strategies to de-escalate suicide situations. During the forty-hour training, officers practice these techniques during role-playing sessions. In many communities, a suicide attempt is an automatic SWAT Team intervention. Since receiving the CIT course, communities like Volusia County, for example, report over a 50% decrease in SWAT team calls. This is due reportedly to the improved results of law enforcement officers responding to suicide attempts.

Florida, therefore, both encourages and supports crisis intervention training of likely first responders at state and local levels. Programs of instruction should specifically include recognition of the potential suicidal situations, suggestions for key steps to be taken on such recognition, and follow through intervention so that the underlying problems do not go unaddressed in the long term. Instruction should be geared to the specific career fields to which it is given, but should contain research-based elements specific to suicide, its recognition, and near-term resolution.

Educating Physicians

Education of and intervention by the primary care physician is likely to be an ideal strategy to reduce suicide, especially among the elderly. Reports by the National Institute of Mental Health indicate that primary care physicians saw 70% or more of elderly suicide victims within one month of their death, 40% within one week, and 20% the same day. Primary care physicians detected only one of six patients who later committed suicide.[6] Furthermore, 50% of those patients who killed themselves never had any contact with mental health providers.[7]

Both doctors and patients have trouble recognizing the signs of major depression in the elderly, leaving it under-recognized and under-treated. Education provided through journal articles or brief information packets for primary care physicians on the pervasiveness of suicide and depression in the elderly can open the door to increased screening for depression. Improved understanding of depression and suicidal ideation among elderly patients will enable doctors to treat the conditions of depression and to make referrals to specialized mental health care. Through journal articles targeting physicians and other medical professionals, education serves as a change agent for improved recognition in the area of suicidology that will result in better care for elderly patients considering suicide or suffering from depression. Educational enhancements aimed at university medical schools

for the purpose of teaching risk factors associated with depression in the elderly and co-occurring symptoms of depression and suicide are additional components of a comprehensive physician education plan.

Physicians spend an average of seven minutes per patient, with limited time to address complex issues.[8] There is evidence that primary care intervention is best accomplished by the addition of a health specialist (e.g. nurse, social worker, or clinical psychologist) to the primary care setting who can obtain needed information from patients (symptoms, comorbid conditions, side effects, and treatment adherence) and to use this information in prompting physicians with on-time and on-target recommendations about appropriate care for their patients.[9]

Screening and Intervention

As previously discussed in chapter two, mental health and substance abuse are often closely related to suicide. Because of this high correlation, one method of early detection and prevention of suicide is screening. Screening can be done in a variety of settings, including schools, hospitals, doctor offices, runaway/homeless shelters, treatment centers and mental health facilities. Choosing the right screening tool for the population and circumstance is imperative.

Screening Youth

In a recent poll of parents by Columbia University, it was found that approximately 75% of all parents would support a screening program in the school system. Another study demonstrated that although a large majority of parents believe that they would be able to tell if their teen was depressed, results of the survey found that only about one third of all teens suffering from mental health problems are known to parents, or any adult for that matter.[10]

One youth screening initiative that is currently being piloted in Florida is Columbia University's TeenScreen program. Columbia University has developed screening tools that identify youth at risk for suicide and/or suffering from unidentified and untreated mental illnesses. The President's New Freedom Commission on Mental Health recognizes the TeenScreen Program as a model program. The program is free of charge to any community, school or organization interested in screening youth.

The Columbia University TeenScreen Program uses a two-stage process to identify at-risk youth. First, all youth who consent to screening and who obtain parental consent complete one of the TeenScreen screening tools--offered in paper-and-pencil or computerized formats. These tools are mental health screens and are not diagnostic, but they do indicate which students require further evaluation. Youth who screen negative are dismissed from the screening, and youth who screen positive are advanced to the second stage, where they are assessed by a mental health professional to determine if further evaluation or treatment would be beneficial. If professional services are recommended, TeenScreen staff assists the youth and his or her family in the referral process. Detecting and treating mental illnesses at a young age can prevent youth suicides.

Screening Adults

Screening is not just for teens. Many doctor's offices are choosing to include a brief screening tool as part of their check-in procedure. The tool should be appropriate for the age group and include questions that screen for the most common mental illnesses and substance abuse disorders related to suicide. By providing immediate attention to the patient's responses, a physician can intervene before the patient is in crisis. This is especially important with the elderly population.

Screening does not necessarily need to take place in a doctor's office. It is feasible to include screening at county health departments, senior centers, community events, employment centers and other places that adults

frequent. Employers should consider encouraging mental health screening as a part of routine physicals. As long as the information is kept confidential and appropriate follow-up treatment is provided, many lives could be saved.

Addressing Treatment Needs

As previously described, mental illnesses are often correlated to the incidence of suicide. The concept of screening has already been discussed to identify those who are unknowingly suffering from mental illnesses in order to identify the risk factors and so to prevent suicide. But identification of the problem is not enough by itself. It must be followed up, when appropriate, by intervention and treatment. Almost half of the individuals who complete suicide in the United States are diagnosed with a mental disorder and are under treatment by a mental health professional.[11] The remaining half, therefore, are not under treatment.

Health care coverage tends to be less generous in covering mental illnesses as compared to physical illnesses. Workplace insurance plans, for example, often require only a co-payment for medical services related to services for physical conditions. The net cost to the patient is the cost of the insurance premium, the annual deductible, and the co-pay. Mental health services, however, if covered at all, will more often require a percentage of total medical service costs to be paid by the patient. Many plans have a maximum lifetime benefit that can be exhausted with a single hospitalization for emergency mental health care.

Addressing Disparities in Treatment Coverages

Similar disparities occur with substance abuse treatment. Although early treatment would forestall future serious medical conditions related to long-term drug abuse, insurers calculate that by the time of onset of long-term illnesses, the client tends not to be insured. There is little incentive, therefore, to provide coverage up front. In addressing such disparities, some states have enacted mental health parity laws that require insurers to cover mental health treatment at the same level as physical health treatment. One year after the enactment of such a law in Minnesota, one company (Blue Cross/Blue Shield) reduced its premiums by five to six percent.[12] By treating mental illnesses up front, not only are lives saved, but the cost of treatment for health related problems are decreased and the quality of life and productivity at work improved.

Disparities in coverage affect outcomes for heart disease, cancer, stroke, diabetes, and other illnesses. The same is true for mental illnesses. In the end, coverage determines the care rendered by medical and health professionals, and influences the patients' managing of their own care.

Ensuring Quality Care

State oversight of standards of quality of care helps to improve the quality and accountability of mental health and substance abuse services. State monitoring systems can help ensure such quality. Oversight assists the state in identifying areas of weakness in service provision, as well as supplying the tools to build on strengths, and providing immediate consultation and ongoing education. Strengthening accountability through quality improvement activity is one way to ensure that precious resources are not inappropriately used, allowing the system to serve more people efficiently with less funding. It also allows for a continuous update of practices to keep apace of unfolding research and national initiatives.

Anti-Depressants

In September 2004 an advisory panel to the Food and Drug Administration (FDA) concluded that antidepressant medications are associated with an increased risk of suicidality when administered to some children and adolescents. These conclusions were based primarily on analysis of findings from placebo-controlled clinical

trials submitted to the FDA. None of the approximately 4,000 individuals in these trials committed suicide. Some, however, exhibited suicidality, which was defined as increased suicidal ideation or making a suicide attempt. Compared to those randomly assigned to placebo (fake medication) individuals taking antidepressants shower a higher rate of suicidality on the order of 2:1. On average approximately 2-3% of individuals prescribed antidepressants in these trials exhibited suicidality. The panel recommended that the FDA issue warnings about this risk

This risk needs to be placed in the perspective of the greater risk of suicidality associated with untreated depression in children and adolescents, which is estimated to be 14%. Furthermore, evidence remains clear that in areas (or countries) where anti-depressants are more widely used, suicide rates — to include teenage suicide rates — go down.[13] The paradox may be explained by individual susceptibility to adverse behavioral effects induced by antidepressants in a small minority of children and adolescents. In this susceptible group, treatment with antidepressants may produce behavioral disorders early in the course of therapy, characterized by agitation, irritability, insomnia, restlessness and other signs of symptoms that may predispose to suicidality. It has also been suggested that initial recovery periods from depression tend to exhibit greater risk of suicide when lethargy is eased even before depression is adequately lifted to the degree that guards against suicidal activity. The response to this dilemma is to educate the patient, his or her parents, and prescribers about this period of increased risk, encourage closer scrutiny of behavioral effects during that period, and carefully monitor dosing. Confusing medication induced adverse behavioral effects with worsening of the underlying depression may lead inappropriately to continuing or escalating medication dosage.

At present, the only medication approved for depression in children and adolescents is fluoxetine; the evidence for the benefit of other antidepressants is less firm. A recent study found that depression in this age group is most effectively treated with a combination of fluoxetine and psychotherapy.[1]

Creating Safer Environments

School Interventions

Schools in partnership with families and communities are obvious places to identify youth at risk of suicide. Supportive and informed school personnel can do much to prevent youth suicide, identify students at risk, and direct youth to prompt, effective treatment. Prevention, education, intervention and follow up steps (i.e., response to suicide attempts and completions) are keys to reducing the number of young people who take their own lives. Schools offer both the opportunity for recognition of suicide ideation and a process of response. At school, students have the greatest exposure to potential responders such as teachers, counselors, coaches, staff and classmates who have the opportunity to help.

Schools need to understand not only the issues of suicide, but also the positive role they can play. Schools and school districts must create, update, review and assess current school policies, procedures, community linkages, and strategies surrounding suicide prevention, intervention, and postvention efforts. Effective prevention programs, early identification of students who may be at risk for suicide, and clearly articulated school policies that are communicated to and understood by staff are critical components of a comprehensive plan. Instruments that can assist schools and school districts to stay current and knowledgeable of effective prevention

[1] Revised September 28, 2004

strategies should be shared and disseminated in the most effective means for utilization (e.g., Florida Department of Education website, Florida Information Resource Network, faculty in-service).

To assist schools with not only providing prevention education, but also to plan for potential crisis, the University of South Florida in conjunction with Nova Southeastern University developed the Youth Suicide Prevention School-Based Guide (*The Guide*). It is intended to be used as an assessment tool and planning guide for schools that are working on building their suicide prevention and response capacity. Checklists are provided to assess a school's policies to support suicide prevention, state of preparedness for dealing with potentially suicidal youth, and ability to respond to the unfortunate circumstance of a student intentionally harming him - or herself. To this end, information is provided to the school on risk factors and warning signs, skills to deal effectively with suicidal youth, and policy recommendations to address administrative issues, school climate, creating family partnerships, and the like. An individual school can use *The Guide* to assess state of preparedness and address policy and/or procedural gaps by following its recommendations.

Bullying Prevention

Adolescents today are dealing with many stressors that can impact their capacity to function on a daily basis. For students with limited internal coping strategies available to them, the stressors they face may become overwhelming. A strong correlate with adolescent depression is excessive feelings of isolation and being alone. Children who are troubled are often isolated from their mentally healthy peers. For some, this is a result of peer neglect while, for others, it involves painful peer rejection. A sense of belonging is important for all humans yet it is developmentally critical for adolescents. For those students who face chronic harassment, their sense of belonging is constantly challenged in environments where they are victimized, persecuted and bullied. The feelings of helplessness that can emerge can lead to violent consequences for both the targeted student and the perpetrator. In the Early Warning, Timely Response document (1998), published by the National Association of School Psychologists, the authors identify many early warning signs of possible violence to self and others. These warning signs are indicators that a student may need help. One of the warning signs listed is a student's feeling of being picked on, persecuted, and humiliated. If not given adequate support in addressing these issues, some children and adolescents may vent in inappropriate, unhealthy ways.[14]

As much as every child has the right to an education, and every child has the right to be safe in school, for students who are bullied, school is not a safe place. Bullying is defined in the professional literature as a series of repeated intentionally cruel incidents involving the same children in the same bully and victim roles.[15] It involves physical and emotional harm; the intent of the bully is to put the targeted child in some type of distress. Typically, bullying does not stop without intervention because the perpetrator is strongly reinforced by the power he or she gains through harassment. Bullying can be expressed directly through physical and verbal attacks, or indirectly by ostracizing, spreading rumors and sabotaging existing peer relationships. Research suggests that incidents of bullying occur every seven minutes and that most victims are unlikely to report the harassment.[16] Bullying is a covert behavior. Adults in the school setting often express frustration with this because they say they "can't deal with what they don't know." Bullying typically starts in about fourth grade, peaks in 7th or 8th grade and begins to dissipate in late high school. If the school environment is not actively addressing bullying from a system wide perspective, bullying behavior can become devastating for many youth.[17]

There are a plethora of anti-bullying programs available. Since most targeted children are unlikely to report the incidents to an authority figure, it is important to educate all the faculty, staff and students. Empowering the student body to address the problem themselves in a socially responsible way can lead to significant reductions in harassment. Conversely, passive observation of the bullying dynamic can contribute to its persistence by reinforcing the bully with attention.[18] To address this critical issue, educators need to teach

students that it is appropriate to ask an adult for help when a classmate is being bullied. Similarly, we must help adolescents understand that students who are targeted by bullies are often isolated and may not have immediate access to a supportive peer group. We need to empower students to establish a climate of zero-tolerance for harassment in their schools.

Limiting Access to Lethal Means

In 2001, Florida had 1,197 suicides caused by a firearm compared to 573 homicides using a firearm.[19] In other words, twice as many Floridians used a firearm with fatal intentions and consequences directed against themselves than against others. Research suggests that an essential aspect of any prevention strategy and one that is often overlooked is restricting access by those evidencing depression and other forms of instability, and especially by those who have articulated suicidal intent, to potentially lethal weapons.[20] Restricting access to means of suicide, especially firearms, has been shown to be an effective method for decreasing the likelihood of adolescent suicide.[21] Given the fact that ease of access to guns in the home is a key risk factor for adolescent suicide and that the most common method for committing suicide in the United States is by firearms, it seems only reasonable to safeguard the home against such tragic misuse of available weapons by children, a position that virtually all advocacy groups support, to include gun advocacy groups.[22] The National Rifle Association, for example, has long preached safety locks and parental responsibility.[23]

An opinion often voiced is that restricting youth access to one means of suicide will only lead to their finding an alternative. Research shows, however, that by limiting access to particular methods of suicide there is not only a decrease in the number of people who use those methods, but also that there is no increase in the use of alternative methods.[24] Despite evidence from numerous studies that suggest that restriction of access to lethal means is an effective prevention component for suicide as well as interpersonal violence among youth, when the Department of Health and Human Service reviewed suicide prevention programs in the United States it found none that included a component for addressing restricting access to means for suicide.[25] Means restriction could possibly be the most under-utilized method for preventing suicide.

As a preventative measure, local law enforcement and suicide prevention advocates must collaborate to educate people about the proper storage and handling of firearms. In the case of suicide, especially among teenagers, it is not necessarily the owner of the gun who uses the gun for suicide.[26] Safety campaigns such as Project ChildSafe from the Bureau of Justice Assistance can educate the community about proper storage and handling of firearms. Project ChildSafe provides firearm safety kits that include gunlocks and safety information free of charge

Another important element to limiting access to lethal means is the education of gatekeepers about obvious dangers. Studies show that clinicians routinely fail to inquire about the patient's access to firearms or other means of suicide. Nor do they take action to make these items less available to the patient.[27] In the older adult population group, those members at highest risk (age 65+) are more likely to have firearms available.

Postvention (Actions After Suicide)

Responsible Media Coverage

According to the National Strategy for Suicide Prevention, research shows that both news reports and fictional accounts of suicide in movies and television can lead to an increase in suicide. [28] In order to prevent a contagion of suicides, it is essential that the media take great care in the coverage of a suicide. Specifically, responsible media coverage of a suicide should include education about suicide as a preventable public health issue. News stories should include information on where to find help if a person is feeling suicidal or knows someone

who is suicidal. The media should take care to not provide specific details about the means for a completed suicide so as to not provide an unstable viewer the tools to "copy" the suicide method. Reporters must be careful not to glorify the deceased person in such a way as to romanticize the act of suicide because others may choose to take their own life in order to be similarly viewed. By being sensitive and informative in the reporting of suicide, media outlets are able to educate the public to prevent further suicides.

Assisting Survivors

Suicide does not just affect the victim. According to the American Association on Suicidology (2001), it is estimated that 1 out of every 64 Americans is a survivor of suicide.[29] This is an alarming statistic. A suicide prevention strategy, therefore, would not be complete without addressing those who are left behind.

Survivors of suicide are at a greater risk to attempt suicide themselves especially if they have not dealt with the many unanswered questions and roller coaster emotions of grief, guilt and helplessness associated with a loved one's suicide. There are a variety of outlets for survivors to begin the healing process. These outlets can help survivors channel their grief and direct their efforts toward helping others. Some survivors choose to join support groups while others find solace in talking to a counselor.

Many survivors in Florida choose to join with the Suicide Prevention Action Network (SPAN) to promote public awareness about the incidence of suicide. SPAN on both national and state levels creates quilts with pictures of loved ones who have died by suicide. The quilts carry the message that suicide can happen to anyone, in any family, at any time. The intent of the quilts is not to memorialize or glamorize suicide, but to give memory to those who have died by suicide.

Another innovative postvention tool for suicide survivors in Volusia and Flagler Counties is the Hope Again Outreach teams. In the aftermath of a suicide, an outreach team consisting of two volunteers (with at least one of these volunteers having survived a suicide themselves) is dispatched to visit the surviving loved ones. These volunteers listen and provide support and information to those who are dealing with the suicide. By providing immediate assistance and resources, the outreach team is not only helping new survivors heal, but they are also providing the necessary support system to prevent a future suicide.

Research

Improve data collection

As previously mentioned in chapter three, it is important to collect data not only on the rate of suicide, but also the risk and protective factors associated with suicide and data related to suicidal ideation and attempts. Using results from the Florida Youth Substance Abuse Survey and from the national Youth Risk Behavior Surveillance are the beginning of a larger initiative to collect youth suicide data.

A pilot project, the *Youth Suicide and Intentional Self-harm Surveillance System*, at NOVA Southeastern University is currently underway to collect and compile information on youth suicide and self-harming behavior using existing data sources. The research will look at data from medical examiners, hospital emergency departments, EMS providers, crisis hot lines, physician's offices, and schools.

To the extent possible, the study will gather information about victim characteristics, mechanisms used, incident circumstances, and services provided. Using this data, policy makers and service providers can better identify local trends and patterns in suicidal or self-harming behavior within individual counties. Local leaders can then tailor services directly to the needs of the community rather than national or state trends. Furthermore, the system provides stakeholders with a yardstick to determine the impact that suicide prevention efforts have

on actual youth suicidal behavior in their community. A similar effort focused on adult suicide data would be helpful.

Psychological autopsies

One of the most efficient study designs available to researchers and one that provides information about an association between an exposure (risk factor) and a disease is the case-control method. This method consists of retrospectively evaluating a risk factor in an individual who has already developed a disease. Using this method, researchers work with individuals who have a disease and find a common thread to determine the risk factors associated with the disease. By definition, suicide results in 100% mortality per case and therefore does not lend itself to such assessment. In the last decade, however, researchers have developed a powerful tool called the psychological autopsy study to evaluate the risk associated with suicide.

Psychological autopsies are investigations that occur after death by suicide. Through a series of structured interviews with acquaintances of the suicide victim, researchers evaluate the psychological state of the deceased at the time before death. Psychological autopsy studies examine a death by suicide in extreme detail and can produce valuable and generalizable findings.[30] Studies utilizing this methodology follow proven protocols in gathering information. Following a death by suicide, professionally trained clinicians conduct semi-structured interviews with informants. These informants are generally parents or other members of the household where the individual was living, a sibling or friend from the victim's peer group, and a schoolteacher or work colleague.

The structures of the interviews are intended to assess the presence of risk factors that were present prior to an individual's suicide. The interviews normally take two to four hours to complete and contain information pertaining to demographic information, education and work history, past suicidal behavior, suicidal intent, health care utilization, physical health status, stressful life events, social network index, and psychological state.[31] A number of valid and precise instruments are available which can be used to elicit information concerning related variables.[32]

Psychological autopsy studies are a useful method for evaluating risk factors and investigating the etiology of suicide. Although there are numerous methods which can be utilized to evaluate factors in persons who engage in suicidal behavior, risk factors in those who attempt suicide and survive may be dissimilar from those who die by suicide. Studies that have been conducted on psychological autopsies indicate that they are both valid and reliable.[33] Although an autopsy study is not a direct intervention for suicidal individuals, they provide valuable information on how to best approach prevention and intervention with individuals who may be at risk for suicidal behavior. They represent one of the few available strategies available for determining how best to identify at risk individuals.

Resources

In order to successfully bring down Florida's suicide rate, it is imperative that available resources are taken into consideration as we implement new strategies. The suicide prevention efforts in the state have largely been provided through existing budgets and resources. As the efforts grow, further collaboration and integration of resources will be necessary to ensure success.

National

Florida is extremely fortunate to collaborate with a variety of suicide prevention resources on a national level. State leadership works closely with the Substance Abuse Mental Health Services Administration (SAMHSA), the Suicide Prevention Action Network (SPAN USA), the Suicide Prevention Resource Center

(SPRC), Columbia University's TeenScreen Program, 1-800-Suicide and a variety of national suicide prevention program providers.

Through a relationship with SAMHSA, Florida is participating in a number of pilot programs. One such program is the Eliminating Barriers Initiative (EBI). In keeping with the President's New Freedom Initiative, which is designed to promote the community integration of persons with mental disabilities, EBI was developed to reduce the stigma and discrimination associated with mental illnesses. EBI is a three year pilot designed to test models and public education materials including radio, television, and print public service announcements (PSAs) in eight states around the country. The information gathered through the initiative will then be provided to other states to use as best practices.

Another key national partner is the Suicide Prevention Action Network (SPAN USA). SPAN USA is a national non-profit organization that works to increase awareness regarding the toll of suicide on our nation and to develop political will to ensure that the government effectively addresses suicide. The organization is unique in that it is driven primarily by survivors of suicide, giving them a venue to transform their grief into action. SPAN works closely with state and national government agencies and non-profits to advance their public policy response to the problem of suicide in America. It was largely through the work of SPAN and it's advocates, hat the U.S. House of Representatives and U.S. Senate passed resolutions recognizing suicide as a national priority and calling for the development of a national strategy.

Florida's Suicide Prevention Task Force members participate in national and local suicide prevention events. They are linked in a variety of ways to SAMHSA and work in tandem with the Suicide Prevention Resource Center (SPRC). Florida makes use of SPRC's expertise to identify best practices for implementation in Florida. The SPRC provides training and resource materials to strengthen suicide prevention networks, as well as technical assistance to the many suicide prevention coalitions and grassroots organizations in the state. The SPRC launched State Suicide Prevention Web Pages in October 2004 to serve as a central collection of information about suicide prevention efforts for each state and provide a forum for sharing communication and resources within and across states. Each state's page includes a brief history of state suicide prevention efforts, highlights of current activities, a link to the state plan, scope of the state plan, state data, legislation, resources, funding sources and more. To view Florida's State Suicide Prevention Web Page, please visit http://www.sprc.org/statepages/.

In recent years, collaboration with Columbia University's TeenScreen Program in Florida has flourished. A number of treatment agencies and schools in Florida are working with TeenScreen to screen for the presence of a mental health disorder in youth that may place them at greater risk for suicide. A number of pilot programs have taken root throughout the state and research is ongoing to measure the effectiveness of screening as a suicide prevention tool.

Florida is an active participant in the National Hopeline Network, 1-800-Suicide. Currently, twelve crisis centers in Florida are part of the network. They are certified by the American Association of Suicidology to provide crisis hotline services in the case of a suicide-related phone call. A person in crisis can dial 1-800-Suicide and within 30 seconds talk to a specially trained crisis line worker. This crisis line worker is then able to assess the risk of the caller's situation and connect the caller to immediate assistance. Florida plans to continue to support and expand the hotline's usage.

Because suicide prevention is a priority, Florida schools and community organizations implement a variety of suicide prevention programs and curriculum. Programs from around the country include the Jason Foundation, the Yellow Ribbon Suicide Prevention Program, the Signs of Suicide (SOS) program, Solutions Unlimited Now

(SUN) Program, Question Persuade Refer (QPR) and Gatekeeper trainings. Florida is always looking for the best and most promising practices to reduce suicide.

State

Florida's political leadership, beginning with the Governor, has prioritized the effort to reduce Florida's suicide rate. Through this leadership, a state task force that includes representatives from state government, academia, grassroots, survivors, mental health professionals, and other experts has generated strong support for the cause. Key state agencies have developed unique approaches to suicide prevention, and have aligned their efforts with both national and local organizations to enclose their progress. Florida benefits greatly from a variety of state suicide prevention organizations and resources.

With the goal to address youth suicide prevention in the schools, Nova Southeastern University (NSU) developed the Youth Suicide Prevention School-based Guide (*The Guide*). This Guide serves as a tool to provide schools with a framework to assess their existing or proposed suicide prevention efforts (through a series of checklists) and provides resources and information that school administrators can use to enhance or add to their existing programs. *The Guide* is based on a review of the current literature and exemplary programs and produced in relatively short, separate issue briefs (sections) combined into a pocket folder. Assessment checklists correspond to particular issue briefs to make finding relevant information easier. Input and reviews were obtained from Florida state administrators (Departments of Health and Education), national experts (Suicide Prevention Resource Center, CDC), survivors, researchers, school district level staff, and select agencies. Although originating in Florida, *The Guide* is in use across the nation.

Through the efforts of the United Way and the Alliance of Information and Referral Systems (AIRS), a nationwide network of call centers is being developed. These call centers are connected on a community level to the phone number 2-1-1. Currently, Florida is served by twelve 2-1-1-call centers that service 36 of Florida's 67 counties. These centers answer 2-1-1 phone calls and assess the callers' needs to determine the service provider most appropriate to handle the crisis. They provide information to the caller and/or refer them to a provider. 2-1-1 call centers have access to a database of national, state and local services available to callers.

In November of 2003, the Florida Suicide Prevention Coalition in partnership with the Suicide Prevention Coalition of Volusia/Flagler Counties hosted the First Statewide Suicide Prevention Conference. The theme of the conference was "Making Strides to Save Lives". The two-day conference featured state and national speakers from the Centers for Disease Control and TeenScreen as well as state speakers from the Florida Department of Health and experts from the field. In 2005, the Florida Suicide Prevention Coalition will again host a conference aimed to gather suicide preventionists from around the state to receive training and plan for the reduction of suicide in Florida. Once again, national, state and local experts will present at the conference to provide the latest best practices and information.

During the 2003 legislative session, the Florida legislature saw the need to provide coordinated and consistent substance abuse and mental health services across the state. As a result of this concern, the Florida Substance Abuse and Mental Health Corporation, Inc. was formed to look at the current substance abuse and mental health system and make recommendations for improvement of "coordination, quality and efficiency of the system" (394.655, Florida Statutes). Since both substance abuse and mental health are closely related to suicide, the Corporation and the Suicide Prevention Task Force work together to look at ways to reduce suicide through the improvement of the existing system. This partnership will continue to be an asset to Florida's suicide prevention efforts.

Florida benefits from a number of organizations that address suicide prevention. Two such are the Florida Initiative for Suicide Prevention (FISP) and the Beth Foundation. FISP is dedicated to changing those factors in our communities that contribute to an environment of alienation, hopelessness, and helplessness and will strongly advocate for public awareness. This is a Florida grassroots not-for-profit advocacy organization with a multi-faceted mission. The Beth Foundation Inc. is a non-profit organization dedicated to reducing the suicide rate in Florida through education and awareness. The Beth Foundation was established to provide training to increase the general knowledge about the nature of suicidal behavior, how to respond and refer a suicidal person for help, and to provide a central clearinghouse for suicide prevention information and resources.

Local

In an attempt to organize the numerous survivors and grassroots organizations addressing the issue of suicide, the Florida Suicide Prevention Coalition (FSPC) was formed in June 2002. The FSPC is a coalition made up of volunteers from around the state dedicated to reducing suicide. Currently, the coalition is split into 15 regions. Each region has a volunteer coordinator who is available to provide information related to suicide prevention in his/her respective region. Each legislative session, FSPC members educate legislators about suicide prevention. Members of the coalition also serve on the state's Task Force. This strong grassroots movement consistently works with and supports the efforts of the Florida Suicide Prevention Task Force.

During the 2004 legislative session, the ACT Corporation received funding from the Florida legislature to pilot a three-pronged approach to preventing suicide in Volusia and Flagler counties. This approach provides Question, Persuade and Refer (QPR) training to community members, Crisis Intervention Training (CIT) to law enforcement members, and treatment to those in crisis situations. Research shows that a person who is contemplating suicide is more likely to talk to a family member or friend than a mental health provider. The first component of the program provides practical training to the general public about identifying the warning signs of suicide and quickly responding to the signs. The second component of ACT's proposal prepares law enforcement officers to deal with individuals in crisis. The CIT trains law enforcement how to talk to a person in crisis to de-escalate the situation. Rather than call in a SWAT team, a community can use CIT trained officers to work with suicidal persons in crisis. The last component reaches members of the community who are in crisis, but who do not have the means to pay for the necessary treatment. It is anticipated that the majority of treatment dollars will be spent on adult males between the ages of 25 and 65 who comprise the highest number of suicides in Volusia and Flagler counties.

Implementing the programs and policies laid out in this strategy will take skillful integration of available resources. Fortunately, over the year a variety of public and private efforts have formed, born of the need to address the terrible problem of suicide. They are prepared to work together toward the common goal of lowering the suicide rate. Florida plans to build on their collective potential in developing an integrated strategy for suicide prevention.

Conclusion

This strategy has attempted to make clear that suicide is a complex social phenomenon that is experienced at different rates of prevelance across subsets of the population. We have set what we believe are achievable objectives that will support our intent to decrease the suicide rate in Florida by one third, and have set reasonable timelines to get us there. We view that no single program, no single policy will bring us success. Only by setting policies and following through with programs in all of the areas and all of the ways outlined in this chapter can we hope to address the complexity of the challenge. As new tools become available (e.g., research data,

treatment modalities, survey instruments, pharmacological breakthroughs, funding opportunities, and so forth) this strategy will seek to integrate them into its plan of action. We are resolved to reach our goals, however, and submit this strategy as a means to that end.

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Appendix A

Table 1.

Suicide Deaths and Rates Per 100,000 Population, by Race and Gender, Florida, Census Year 2003

Number of Deaths					Rates Per 100,000 Population				
	Total	White		Non-White		Total	White		Non-White	
Year		Male	Female	Male	Female		Male	Female	Male	Female
2003	2294	1677	474	120	22	13.4	24.4	6.6	8.0	1.4

Homicide Deaths and Rates Per 100,000 Population, by Race and Gender, Florida, Census Year 2003

Number of Deaths					Rates Per 100,000 Population				
	Total	White		Non-White		Total	White		Non-White	
Year	Male	Female	Male	Female		Male	Female	Male	Female	
2003	1004	357	169	391	85	5.8	5.2	2.4	26.1	5.3

Note: Table recreated using data from the Florida Vital Statistics Annual Report, 2003[1].

Appendix B

U.S.A. Suicide: 2001 Official Final Data

	Number	Per Day	Rate	% of Deaths
Nation	30,662	83.9	10.8	1.3
Males	24,672	67.6	17.6	2.1
Females	5,950	16.3	4.1	0.5
Whites	27,710	75.9	11.9	1.3
Nonwhites	2,912	8.0	5.6	0.9
Elderly (65+)	5,393	14.8	15.3	0.3
Young (15-24)	3,971	10.9	9.9	12.3

Completions: the suicide rate increased slightly in 2001 from 2000 following a six-year consecutive decline.

- Average of 1 person every 17.2 minutes killed him/herself.
- Average of 1 old person every 1 hour, 37.5 minutes killed him/herself.
- Average of 1 young person every 2 hours, 12.4 minutes killed him/herself.
- There are 4.1 male deaths by suicide for each female death by suicide.
- Suicide is the 11th ranking cause of death in U.S. (Homicide ranks 13th)
- Suicide is the 3rd ranking cause of death among the young:

Cause	Number	Rate
1 – Accidents	14,411	80.7
2 – Homicide	5,297	13.3
3 – Suicide	3,971	9.9

Attempts (figures are estimates; no official U.S. national data are compiled):

- 765,000 annual attempts in U.S.
- 25 attempts for every death by suicide for nation; 100-200:1 for young; 4:1 for elderly.
- An estimated 5 million living Americans have attempted to kill themselves.
- 3 female attempts for each male attempt.

Survivors (i.e., family members and friends of a loved one who died by suicide).

These numbers are based on estimates:

- Each suicide intimately affects at least 6 other people. Thus, if there is a completed suicide every 17 minutes, then there are 6 new survivors every 17 minutes as well.
- Based on the more than 742,000 suicides from 1977 through 2001, it is estimated that the number of survivors in the U.S. is 4.45 million.

Suicide Methods	Number	Rate	% of Total
Firearm suicides	16,869	5.9	55.1%
Suffocation/hanging	6,198	2.2	20.2%
Falls	651	0.2	2.1%
Drowning	339	0.1	1.1%
Poisoning	5,191	1.8	17.0%
Cut/pierce	458	0.2	1.5%
Fire/flame	147	0.1	0.5%
All Other	13,753	4.8	44.9%

U.S.A. Suicide Rates 1990-2001

(Rates per 100,000 population)

Group/ Age	90	91	92	93	94	95	96	97	98	99	00	01
5-14	0.8	0.7	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.6	0.8	0.7
15-24	13.2	13.1	13.0	13.5	13.8	13.3	12.0	11.4	11.1	10.3	10.4	9.9
25-34	15.2	15.2	14.5	15.1	15.4	15.4	14.5	14.3	13.8	13.5	12.8	12.8
35-44	15.3	14.7	15.1	15.1	15.3	15.2	15.5	15.3	15.4	14.4	14.6	14.7
45-54	14.8	15.5	14.7	14.5	14.4	14.6	14.9	14.7	14.8	14.2	14.6	15.2
55-64	16.0	15.4	14.8	14.6	13.4	13.3	13.7	13.5	13.1	12.4	12.3	13.1
65-74	17.9	16.9	16.5	16.3	15.3	15.8	15.0	14.4	14.1	13.6	12.6	13.3
75-84	24.9	23.5	22.8	22.3	21.3	20.7	20.0	19.3	19.7	18.3	17.7	17.4
85+	22.2	24.0	21.9	22.8	23.0	21.6	20.2	20.8	21.0	19.2	19.4	17.5
65+	20.5	19.7	19.1	19.0	18.1	18.1	17.3	16.8	16.9	15.9	15.3	15.3
Men	20.4	20.1	19.6	19.9	19.8	19.8	19.3	18.7	18.6	17.6	17.5	17.6
Women	4.8	4.7	4.6	4.6	4.5	4.4	4.4	4.4	4.4	4.1	4.1	4.1
White	13.5	13.3	13.0	13.1	12.9	12.9	12.7	12.4	12.4	11.7	11.7	11.9
Nonwh	7.0	6.8	6.8	7.1	7.2	6.9	6.7	6.5	6.2	6.0	5.9	5.6

Official data source:[2]

$$\text{Suicide rate} = \frac{\text{number of suicides by group}}{\text{population of group}} \times 100{,}000$$

Appendix C

National Center for Health Statistics Vital Statistics System for numbers of deaths

The following tables (1 - 3) depict the Age-Adjusted Suicide Death Rate within the state of Florida between 2000 and 2002, among three demographic groups: (a) all races, all sexes, (b) white, all sexes, and (c) nonwhite, all sexes. Tables 1 - 3 were generated using data from the Florida Department of Health, Office of Planning, Evaluation and Data Analysis (2004).[3]

It is worthy for those interested in comparing current death rates to those from previous years to that the data for 1999 and subsequent years are not fully comparable to data from 1998 and prior years, due to changes in coding of causes of deaths resulting from the switch from the ninth revision of the International Classification of Diseases (ICD9) to the tenth revision (ICD10). The impact of this coding change for 113 selected causes of death is shown in the Vital Statistics Annual Reports.[4]

Table 1. Age-Adjusted Suicide Death Rate; All Races, All Sexes

	Death		Total Population		Age-Adjusted Death Rate	
	2001	2002	2001	2002	2001	2002
State Total	2,290	2,332	16,412,296	16,772,201	13.3	13.2

Table 2. White AADR – Suicide; For White, All Sexes

	Deaths		Total Population		Age-Adjusted Death Rate	
	2001	2002	2001	2002	2001	2002
State Total	2,149	2,205	13,448,485	13,728,022	14.9	14.9

Table 3. NonWhite AADR – Suicide; For NonWhite, All Sexes

	Deaths		NonWhite Population		Age-Adjusted Death Rate	
	2001	2002	2001	2002	2001	2002
State Total	141	127	2,963,811	3,044,179	4.9	4.3

2001, United States
Suicide Injury Deaths and Rates per 100,000
All Races, Both Sexes, Ages 0 to 85+
ICD-10 Codes: X60-X84, Y87.0,*U03

Age Group	Number of Deaths	Population	Crude Rate
00-04	0*	19,363,555	0.00*
05-09	7*	20,208,124	0.03*
10-14	272	20,910,440	1.30
15-19	1,611	20,271,312	7.95
20-24	2,360	19,711,423	11.97
25-29	2,389	19,023,216	12.56
30-34	2,681	20,791,657	12.89
35-39	3,176	22,317,757	14.23
40-44	3,459	22,822,527	15.16
45-49	3,260	20,798,457	15.67
50-54	2,682	18,429,907	14.55
55-59	1,985	14,196,475	13.98
60-64	1,332	11,119,448	11.98
65-69	1,212	9,538,756	12.71
70-74	1,220	8,783,724	13.89
75-79	1,219	7,429,524	16.41
80-84	973	5,152,961	18.88
85+	769	4,448,309	17.29
Total	**30,607**	**285,317,572**	**10.73**

2001, Florida
Suicide Injury Deaths and Rates per 100,000

All Races, Both Sexes, Ages 0 to 85+

ICD-10 Codes: X60-X84, Y87.0,*U03

Age Group	Number of Deaths	Population	Crude Rate
00-04	0*	999,797	0.00*
05-09	1*	1,044,053	0.10*
10-14	17*	1,110,076	1.53*
15-19	71	1,047,104	6.78
20-24	121	972,215	12.45
25-29	160	976,212	16.39
30-34	161	1,099,376	14.64
35-39	217	1,243,070	17.46
40-44	230	1,263,740	18.20
45-49	272	1,133,493	24.00
50-54	213	1,026,376	20.75
55-59	167	863,066	19.35
60-64	116	758,457	15.29
65-69	104	724,694	14.35
70-74	134	721,210	18.58
75-79	122	617,103	19.77
80-84	103	424,861	24.24
85+	105	348,427	30.14
Total	**2,314**	**16,373,330**	**14.13**

Age-Adjusted Suicide Death Rate[5]

Single Year Rates for All Races All Sexes

	Number of Deaths			Total Population			Age-Adjusted Death Rate		
County	**2001**	**2002**	**2003**	**2001**	**2002**	**2003**	**2001**	**2002**	**2003**
State Total	2,290	2,332	2,294	16,412,296	16,772,201		13.3	13.2	12.7
Alachua	30	31	37	224,397	229,524	232,110	15.4	14.9	16.9
Baker	3	2	4	22,641	23,105	23,472	12.9	8.2	16.8
Bay	18	27	27	150,748	152,818	155,414	11.7	16.4	17.7
Bradford	2	3	3	26,136	26,649	27,084	7.4	10.8	10.3
Brevard	89	84	102	487,131	497,429	510,622	17.6	15.3	19.1
Broward	217	263	212	1,654,923	1,673,972	1,706,363	12.6	15	11.8
Calhoun	2	1	3	13,101	13,286	13,491	16.3	6.9	23.4
Charlotte	31	21	29	145,481	149,486	152,865	23.6	13.5	20.1
Citrus	26	27	24	121,078	123,704	126,475	23.1	18.4	14.6
Clay	25	25	24	144,161	151,746	157,325	17.8	17	15.1
Collier	38	31	32	267,632	281,148	295,848	13.6	10.4	10.2
Columbia	8	12	5	57,354	58,537	59,218	13.6	19.4	7
Dade	218	219	203	2,292,316	2,320,465	2,354,404	9.4	9.2	8.4
Desoto	4	2	3	32,741	32,959	33,912	11.8	5.6	8.8
Dixie	3	3	2	14,154	14,530	14,768	17.1	20.1	13.1
Duval	108	109	126	797,566	813,817	829,937	13.8	13.4	15.5
Escambia	28	36	49	297,321	300,421	304,165	9.3	11.7	16.1
Flagler	3	6	13	53,881	58,004	62,511	7.9	11.6	23.4
Franklin	1	3	1	9,974	10,250	10,530	11.5	29.9	5.3
Gadsden	5	4	1	45,419	46,073	46,600	11.4	9.1	2.1
Gilchrist	0	3	2	14,759	15,140	15,637	0	18.2	13.1
Glades	1	3	2	10,624	10,675	10,759	11.3	28.8	17.2
Gulf	2	2	3	15,101	15,290	15,691	12.2	12.3	16.8
Hamilton	0	1	1	13,792	13,952	14,039	0	7.2	9.2
Hardee	3	2	4	27,021	27,474	27,434	12.4	7.8	15.6
Hendry	6	1	2	36,256	36,174	36,739	19.5	3.6	7
Hernando	26	30	30	133,497	137,613	141,574	19.8	23.7	20.6
Highlands	16	17	11	88,373	89,343	90,770	15.6	19.1	8.6
Hillsborough	148	123	124	1,034,164	1,062,140	1,085,318	14.3	11.5	11.2
Holmes	1	2	2	18,713	18,746	18,983	5.2	11.3	9.4
Indian River	19	16	16	116,291	118,884	121,887	14	8.4	11.6
Jackson	8	6	2	47,534	47,963	49,218	16.6	12.8	4.2
Jefferson	4	1	1	13,107	13,329	13,618	25.3	6.5	7.6
Lafayette	3	1	2	7,076	7,245	7,394	42.6	14	27.4
Lake	33	50	41	222,988	233,622	242,919	12.5	18.7	14.9
Lee	68	72	73	459,278	481,014	499,387	14.3	13.6	14.1
Leon	21	20	26	245,070	249,744	256,921	10.1	8.9	12.1
Levy	7	9	13	35,325	36,197	36,856	18.4	19.8	34.6
Liberty	0	0	0	7,145	7,165	7,248	0	0	0
Madison	4	2	1	18,878	18,974	19,183	21.2	12.1	5.5
Manatee	52	41	36	272,342	279,366	288,888	17.6	13.3	11.8

Marion	53	50	43	265,629	273,602	284,232	18.3	16.4	15
Martin	17	25	24	129,415	132,009	135,280	13.9	18.2	13.9
Monroe	16	16	24	80,850	81,030	80,473	16.6	16.4	25.1
Nassau	6	12	10	59,452	61,643	63,523	10.7	18.8	14.5
Okaloosa	18	28	28	174,228	178,036	182,020	10.2	15.4	15.4
Okeechobee	3	8	4	36,211	36,715	37,377	7.2	20	7.9
Orange	95	91	82	936,749	962,531	989,962	10.4	9.6	8.6
Osceola	32	27	25	182,202	197,901	213,723	17.5	13.5	11.7
Palm Beach	172	153	149	1,160,977	1,190,653	1,218,508	13.7	12	11.3
Pasco	57	77	73	354,196	364,900	378,085	16.5	22.5	19.8
Pinellas	167	154	168	930,602	935,274	941,435	15.9	15.5	16.8
Polk	83	64	48	498,011	504,381	514,247	16.5	12.8	9.1
Putnam	13	11	8	70,929	71,481	72,114	15.2	15.9	10.1
Saint Johns	13	20	25	129,880	135,467	141,216	9.6	13.1	16.7
Saint Lucie	35	27	32	199,390	205,396	213,614	15.8	12.5	13.4
Santa Rosa	20	17	20	122,252	125,947	129,842	15.6	13.4	16.2
Sarasota	55	64	65	335,428	341,784	350,664	14.2	18.9	18.2
Seminole	42	58	52	380,763	389,549	396,934	10.9	14	12.9
Sumter	6	6	12	58,083	61,979	63,522	11.2	7	17.2
Suwannee	7	8	3	35,744	35,815	37,479	20.3	22.1	7.1
Taylor	5	4	2	19,594	19,878	20,794	23.8	18.2	9.2
Union	1	4	2	13,660	13,786	13,793	6.6	22.1	15.4
Volusia	81	83	90	453,840	462,377	473,185	16.6	16.3	17.2
Wakulla	4	1	6	23,936	24,340	25,141	17	3.6	24
Walton	6	10	6	43,270	46,052	47,472	14.6	21.6	13.7
Washington	2	3	0	21,516	21,702	21,987	10	13.4	0

Data Note(s): ICD-10 Code(s): X60-X84, Y87.0 Age-adjusted rates are calculated using the Year 2000 Standard Population Proportion. Population estimates are from July 1 of the specified year and are provided by the Office of the Governor.

Data for 1999 and subsequent years are not fully comparable to data from 1998 and prior years, due to changes in coding of causes of deaths resulting from the change from the ninth revision of the International Classification of Diseases (ICD9) to the tenth revision (ICD10).

Appendix D

Suicide rates per 100,000 inmates

	US			FL		
Year	Suicides	Inmate Population (Jan. 1 of succeeding year)	Rate Per 100,000 Inmates	Suicides	Inmate Population (Jan. 1 of succeeding year)	Rate Per 100,000 Inmates
1990	122	802,428	15.20	2	44,387	4.51
1991	120	862,761	13.91	3	46,638	6.43
1992	123	913,739	13.46	6	48,466	12.38
1993	162	995,730	16.27	5	53,048	9.43
1994	171	1,065,388	16.05	11	57,139	19.25
1995	179	1,146,059	15.62	5	63,866	7.83
1996	168	1,195,568	14.05	5	63,763	7.84
1997	176	1,249,595	14.08	4	65,122	6.14
1998	199	1,317,096	15.11	6	67,224	8.93
1999	185	1,349,383	13.71	6	69,596	8.62
2000	201	1,379,965	14.57	8	71,319	11.22
2001	177	1,414,985	12.51	3	72,403	4.14
2002				8	74,939	10.68
2003				5	79,338	6.30

Data obtained from Corrections Yearbook for respective years

US Inmate Population = Grand total of all state and federal inmates under their respective jurisdiction

Population number used for comparison is January 1st of succeeding year.(i.e. 01/01/96 population used for 1995 suicides)

FL Dept. of Corrections, Bureau of Research & Data Analysis

updated 6/16/04

Appendix E

Air Force Approach

The U.S. Air Force attacked the suicide issue with a program that has been described as "a landmark program" to which "nothing else compares".[6] Suicide was the second leading cause of death among USAF military personnel between 1990 and 1994. Consequently, they developed and instituted a suicide prevention program. They began by organizing a team of 75 experts, who represented 15 functional areas. The team studied the suicide issue and recommended a prevention strategy.

The team identified three common themes among USAF suicide victims: (a) *stigma* – USAF personnel avoided seeking professional assistance due to a fear of losing their jobs because of the stigma attached to mental health treatment; (b) *beliefs* – airmen believed that commanders and supervisors routinely viewed mental health records, thereby, promoting their fear of job loss; and (c) *cultural norms* – the popular sentiment once expressed among the Air Force, "the Air Force takes care of its own" was no longer experienced by the majority of people. Thus, the USAF's sense of support and belonging was deteriorating.[7]

Next, the team identified risk and protective factors in the population.[8] Risk factors for suicide among USAF personnel are:

- The law
- Finances
- Intimate relationships
- Mental health
- Job performance
- Alcohol and other substance use
- Social isolation and poor coping skills

Their list of protective factors includes strong and effective:

- Social support and interconnectedness
- Individual coping skills
- Cultural norms to promote responsible help-seeking behaviors

With a firm grasp of the most common problems, risk factors, and protective factors associated with suicide in the USAF, the team pushed forward and developed their plan to reduce and prevent suicide in the USAF. Eleven key initiatives comprise their suicide prevention program.[9] They are:

1. Leadership Involvement – Proactive, rapid, and ongoing information through the chain of command.
2. Professional Military Education – Community training and professional military education on how to effectively intervene with a suicidal individual.
3. Guidelines for Commanders on Use of Mental Health Services – To counter confusion and offer clear guidance on how and when best to access mental health services.
4. Community Preventive Services – Mental health staff in the community to serve in prevention/non-clinical roles, a first step to removing stigma.

5. Community Education and Training – Coined the LINK program (Look, Inquire, Note, Know), a preventive web of individuals around those at risk.
6. Investigative Interview Policy – To assist individuals under investigation with their emotional psychological needs.
7. Critical Incident Stress Management – To address needs of airmen as survivors when a suicide occurs.
8. Integrated Delivery System for Human Services Prevention – A major recommendation, this initiative created a coordinated delivery system for USAF health and human services.
9. Limited Patient Privilege – A psychotherapist-patient privilege to enhance confidentiality so members would more willingly seek mental health services.
10. Behavioral Health Survey – A tool to assess behavioral health aspects of a unit and members of a unit. It was developed in cooperation with the Johnson Institute (now Hazelden) of a Minneapolis (a civilian contractor). This is a 196-item questionnaire that assesses five main behavioral health factors: alcohol use frequency, emotional distress, lack of cooperation with partner, psychological stress and job dissatisfaction.
11. Epidemiological Database and Surveillance System – This centralized database for all fatal and nonfatal self-injuries tracks events and also detects potential risk factors for a suicide attempt through its Suicide Event Surveillance System (SESS), which collects broad data including psychological, social, behavioral, relationship, and economic status of airmen.

Within the first eight months of its full implementation in 1997, the USAF suicide rates decreased dramatically from a high of 16.4 per 100,000 in 1994 to 2.2 per 100,000 in 1999. Within its first six years, the USAF suicide prevention program demonstrated the following impact:

- 33% decrease in suicides
- 54% decline in severe family violence
- 51% decline in homicides
- 18% decrease in accidental deaths

The USAF's prevention program is commendable for several reasons. They saw a need, took action, and achieved desirable results. During a time when the suicide issue has reached epidemic proportions across the nation, placing the lives of so many at risk, the USAF provides a stellar model of which community leaders and strategists would be wise to take notice and adapt accordingly. As the USAF so competently demonstrated, when the decision is made to take on a problem, effective results can prevail.

Appendix F

Adult Suicide Prevention Measurement

Research grants are awarded by agencies such as the CDC, National Institute for Mental Health (NIMH), American Association of Suicidology (AAS), etc., to assist researchers in their efforts to collect and analyze data that can advance science and society's knowledge about particular phenomenon, diseases, or behaviors, etc. For instance, the AAS currently offers several NIMH-funded grants specific to the area of suicide:

- National Strategy for Suicide Prevention
- NIMH Project Announcement – "Studies of Suicidal and Suicidal Behavior."
- NIMH Grant Project Announcement – "Interventions for Suicidal Youth."
- AFSP (American Foundation for Suicide Prevention) Research Grants
- CDC/NCIPC (National Center for Injury Prevention and Control)
- Additional information on these and other grants offered through the AAS are available at www.suicidology.org.

The CDC recently announced its new research grants and funding opportunities in the area of Injury Prevention. In its effort to prevent injuries and the resulting disabilities, deaths, and costs, the CDC is funding research in seven key areas:

1. At home and in the community
2. Sports, recreation, and exercise
3. Transportation
4. Intimate partner violence, sexual violence, and child maltreatment
5. Suicidal behavior
6. Youth violence
7. Acute care, disability, and rehabilitation

Additional on this and other CDC-funded research grants is available at: http://www.cdc.gov/ncipc/res-opps/funding_overview.htm.

The funds provided by a research grant would allow one to obtain the resources necessary to design and implement a well-organized, controlled study assessing the effectiveness of the Florida Suicide Prevention Strategy among adults. The steps of carrying out such a research project would be fairly straightforward, if the researcher plans efficiently. For instance, the basic outline of a potential research study may proceed as follows:

1. **Identify the phenomenon or problem.**
   Suicide rates in the state of Florida are unacceptable (2,332 deaths by suicide in 2002; 14.0 per 100,000). Suicide rates among the elderly are highest.
2. **Ask a question**
   Florida officials have implemented a program designed to reduce the suicide rate. How can we track the success of the program and determine if it is actually helping to reduce the suicide rate?
3. **Identify the target population**
   Elderly people.

4. **Where will you find your population?**
   Nursing homes, Assisted/Independent Living Facilities, and/or Community Centers. The researchers will contact local facilities to obtain permission.
5. **What tools will you use to answer the question?**
   The Modified Scale for Suicidal Ideation (MSSI) will measure the progress of the Florida Suicide Prevention Strategy, as indicated by reduced post-test scores on subjects' suicidal ideations and suicidal behaviors subscales as compared to their pre-test scores.
6. **How will you go about collecting the needed information?**
   Three doctoral students from Florida State University's (FSU) Clinical Psychology Program will be trained and responsible for going to the designated facilities, obtaining the written consent of the participants, and administering the questionnaires. The research assistants (i.e., grad. students), in return, gain valuable research experience to further their careers, co-authorship on the published study, and they will be compensated financially through the grant funding.
   Target sample size = 1,000 (this number will be estimated by a statistician. The sample size should be large enough to have significant effect on the data.)
7. **Once the information has been gathered, how will you make sense of it?**
   The research assistants will score, enter, and analyze the data (the latter only if one or more feels confident in his/her statistical prowess).
8. **What did you find out?**
   The primary researcher will discuss the results in the results section of the manuscript.
9. **How could you have done things better? What are the limitations?**
   These issues will be addressed by the primary researcher in the discussion section.
10. **What does the information you discovered mean for everyone else? (i.e., why is it important?)**
    This issue will be addressed by the primary researcher in the discussion section.

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[1] *Florida Vital Statistics Annual Report, 2003.* (Data to be published in the CD-ROM entitled Florida Vital Statistics Annual Report, 2003.) (p.79, Chart D-13).

[2] Arias, E., Anderson, R.N., Kung, H.C., Murphy, S.L., & Kochanek, K.D. (2003). *Deaths: Final data for 2001.* National Vital Statistics Reports, 52. (Data to be published in the CD-ROM entitled Vital Statistics of the United States, Mortality, 2001.) (p.91, Table 39).

[3] *Age-adjusted Suicide Death Rate, for All Races, All Sexes, 2004.* Florida Department of Health, Office of Planning, Evaluation and Data Analysis. (On-line). Available: www.floridacharts.com).; *Nonwhite AADR-Suicide, for Nonwhite, All Sexes, 2004.* Florida Department of Health, Office of Planning, Evaluation and Data Analysis. (On-line). Available: www.floridacharts.com).; *White AADR-Suicide for White, All Sexes, 2004.* Florida Department of Health, Office of Planning, Evaluation and Data Analysis. (On-line). Available: www.floridacharts.com).

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[6] Pazur D. (2004). *A landmark program "beyond compare": The USAF suicide prevention program.* Preventing Suicide, 3(2):2-9.

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