

SB

1988

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FILE

FISCAL NOTE

STATE OF ALASKA
2001 LEGISLATIVE SESSION

Fiscal Note Number: 2
 Bill Version: CSSB 198(HES)
 (S) Publish Date: 4/30/01

Revision Date/Time (Note if correction): 4/28/01 Dept. Affected: Health & Social Services
 Title: Statewide Suicide Prevention Council BRU: Administrative Services
 Component: Commissioner's Office
 Sponsor: Senator Halford et al
 Requester: Senate (Fin) Component Number: 317

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Personal Services	80.5	83.1	85.6	88.6	91.3	91.3
Travel	50.0	53.9	55.0	55.0	55.0	55.0
Contractual	108.5	112.0	108.4	105.4	102.7	102.7
Supplies	1.0	1.0	1.0	1.0	1.0	1.0
Equipment	10.0					
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	250.0	250.0	250.0	250.0	250.0	250.0

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ()						
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health	125.0	125.0	125.0	125.0	125.0	125.0
1092 MHTAAR	125.0	125.0	125.0	125.0	125.0	125.0
TOTAL	250.0	250.0	250.0	250.0	250.0	250.0

Estimate of any current year (FY2001) cost: 0.0

Check this box (X) if funding for this bill is included in the Governor's FY 2002 budget proposal:

POSITIONS

Full-time	1	1	1	1	1	1
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)
 This bill establishes a 15-member Suicide Prevention Council. The Council's operating costs would include the salary for a partially exempt program coordinator, office space, travel and per diem costs for the Council to meet twice a year and monthly by teleconference. The balance of the available budget would be applied towards contracts for Suicide Prevention statewide programs and public awareness campaigns, and the completion of an annual report. See attached cost detail.

Prepared by: Jane Clarke Phone 465-1630
 Division: Administrative Services Date/Time 4/28/01 3:07 PM
 Approved by: Elmer A. Lindstrom, Special Assistant Date 4/28/01 3:07 PM
 Agency: Department of Health & Social Services

For distribution information, call the Governor's Legislative Office

ANALYSIS: (continued)

FY02 cost detail:

- \$80.5 Personal Services - Range 21 partially exempt program coordinator
- \$50.0 Travel and per diem for meetings of the full Council
- \$15.0 Contractual - office space for program coordinato: and conference room
- \$ 8.0 Contractual - monthly teleconferences for the full Council
- \$ 5.0 Contract for annual report
- \$80.5 Contracts for statewide suicide prevention programs, public awareness campaign
- \$ 1.0 Office supplies
- \$10.0 Computers and office furnishings (first year only)

\$250.0 FY02 total

Secretary

FISCAL NOTE

STATE OF ALASKA
2001 LEGISLATIVE SESSION

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Travel	50.0	53.9	55.0	55.0	55.0	55.0
Contractual	108.5	112.0	108.4	105.4	102.7	102.7
Supplies	1.0	1.0	1.0	1.0	1.0	1.0
Equipment	10.0					
Land & Structures						
Grants & Claims						
Miscellaneous						
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CAPITAL EXPENDITURES						
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ANALYSIS: (Attach a separate page if necessary)

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Prepared by: Janet Clarke Phone 465-1630
Division: Administrative Services Date/Time 4/28/01 3:07 PM
Approved by: Elmer A. Lindstrom, Special Assistant Date 4/28/01 3:07 PM
Agency: Department of Health & Social Services

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Page 1 of 2

ANALYSIS: (continued)

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- \$10.0 Computers and office furnishings (first year only)

\$250.0 FY02 total



ALASKA STATE LEGISLATURE

Senator Rick Halford

President of the Senate

While in Session:
State Capitol
Juneau, AK 99801-1182
907-465-4955

While in Interim:
P.O. Box 670190
Chugiak, AK 99567
907-694-4955

Senate Bill 198

Statewide Suicide Prevention Council

"The greatest gift we can give is the gift of life."

Suicide is preventable.

It is devastating to lose someone to suicide at any age, but it is especially tragic to lose a young person who has so much to live for. Suicide is a final cry of despair, and we need to hear that cry.

In 1999, the United States Surgeon General issued "A Call to Action" to prevent suicide. The report made 15 recommendations categorized in the areas of awareness, intervention and methodology. Hearing the cries and responding, Senate Bill 198 is another step in answering both the state and the national call to action.

SB 198 will establish a statewide suicide prevention council made up of fourteen private and public members representing rural and urban Alaska. Two members from both the House and Senate would sit on the council. The governor would appoint ten members, including experts in substance abuse and mental health, as well as people who have been directly impacted by suicide, and who work with youth across the state.

Suicide is an on-going epidemic in many parts of the state --- especially rural Alaska and the Matanuska-Susitna Valley --- and the numbers are at an all-time high. This is heart breaking. We all must work together to reduce the toll suicide is having on the people of our state.

The council will focus on finding ways to reduce suicide rates, broaden public awareness of the suicide warning signs and enhance suicide prevention services and programs throughout the state. Each March the council will submit a report to the Legislature and the governor with its findings and recommendations.

A prior effort to study suicide in Alaska was initiated over twelve years ago when Senator Willie Hensley brought the issue to the forefront. The lives of Alaskans are still at risk.

Establishing this suicide prevention council has bi-partisan support in the Senate. I sincerely urge all members of the committee to join me in supporting SB 198 by offering a hand of support and lifting them from despair.

"Hope - the major weapon against the suicide impulse." Karl Menninger

Received via email on 4/23/01

Dear Senator Halfor J:

I am writing to express my support for SB 198, creating a state suicide prevention council. I think I speak for many people in the Yukon-Koyukuk region when I express my gratitude for your attention to the issue of suicide. Since I became the Director of Yukon Koyukuk Mental Health here in Galena, I have seen how the suicide of one young person devastates hundreds of friends, associates, and loved ones. The people here want badly for the dying to stop. Supporting them with a council and a coordinator is a good idea.

I favor creating a suicide prevention council, but I believe it will be very important to ensure that the areas and people who are losing loved ones to suicide have the greatest say on the council. I worked in Anchorage for years and know first-hand that urban folks have a hard time understanding how things work in the Bush. Although suicide is not just a rural, Native problem, our people out here are disproportionately represented in the suicide statistics. They must be allowed to speak and plan for themselves. I also hope to see a statewide suicide prevention plan and a funded coordinator position to carry out those plans.

Again, I support your bill and hope to see our state move forward in addressing this difficult problem.

Sincerely,
Diana Weber, MS
Director, Yukon Koyukuk Mental Health Program

550 W. 7th Avenue, Suite 1820
Anchorage, AK 99501
Main line: (907) 269-7960
FAX: (907) 269-7965

The TRUST

The Alaska Mental Health Trust Authority

April 17, 2001

Senator Rick Halford
State Capitol
Juneau, AK 99801-1182

Dear Senator Halford:

Subject: Support for Suicide Prevention Council

This letter is to acknowledge the Trust's appreciation for your efforts at addressing the problem of Alaska's high suicide rate by establishing a statewide Suicide Prevention Council, and to confirm the Trust's commitment regarding funds for this initiative.

For FY02, the Trust is willing to match \$125,000 in MHTAAR with \$125,000 GF/MH to establish the Council and facilitate its work.

Trustees look forward to working with the Council and appreciate your willingness to support this important effort.

Sincerely,



Jeff Jessee
Executive Director

U.S.A. SUICIDE: 1998 OFFICIAL FINAL DATA

	Number	Per Day	Rate	% of Deaths		
Nation.....	30,575	83.8	11.3	1.3		
Males.....	24,538	67.2	18.6	2.1	Group (Number of Sui.)	Rate
Females.....	6,037	16.5	4.4	0.5	White Male (22,174)	20.3
Whites.....	27,648	75.7	12.4	1.4	White Female (5,474)	4.8
Nonwhites.....	2,927	8.0	6.2	0.9	Nonwhite Male (2,364)	10.5
Blacks.....	1,977	5.4	5.7	0.7	Nonwhite Female (563)	2.3
Elderly (65+ yrs.).....	5,803	15.9	16.9	0.3	Black Male (1,659)	10.2
Young (15-24 yrs.).....	4,135	11.3	11.1	13.5	Black Female (318)	1.8

Completions:

- Average of 1 person every 17.2 minutes killed themselves.
- Average of 1 old person every 1 hour 30.1 minutes killed themselves.
- Average of 1 young person every 2 hours 7.1 minutes killed themselves. (If the 324 suicides below age 15 are included, 1 young person every 1 hour 57.9 minutes)
- 8th ranking cause of death in U.S.—15th for old; 3rd for young
- 4:1 male completions for each female completion.
- Suicide ranks 8th as a cause of death; Homicide ranks 13th

	Cause	Number	Rate
	All Causes	30,627	82.3
	1-Accidents	13,349	35.9
	2-Homicide	5,506	14.8
	3-Suicide	4,135	11.1

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

- 764,000 annual attempts in U.S.
- 25 attempts for every completion for nation. 100-200:1 for young, and 4:1 for elderly.
- 5 million living Americans (estimate) 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):

- Each suicide intimately affects at least 6 other people. (estimate)
- Based on the over 732,000 suicides from 1974 through 1998, estimated that the number of survivors of suicides in the U.S. is 4.4 million (1 of every 62 Americans in 1998); number grows more than 180,000 each year.
- If there is a suicide every 17 minutes, then there are 6 new survivors every 17 minutes as well.

<u>Suicide by Firearms:</u>	Number	Rate	Percent of Total		Number	Rate	Percent of Total
Firearm suicides USA	17,424	6.4	57.0%	All Other USA	13,151	4.9	43.0%
Firearm suicides Young	2,510	6.7	60.7%	All Other Young	1,625	4.4	39.3%
Firearm suicides Old	4,113	12.0	70.9%	All Other Old	1,690	4.9	29.1%
Firearm suicides Male	15,104	11.4	61.6%	All Other Male	9,434	7.1	38.4%
Firearm suicides Female	2,320	1.7	38.4%	All Other Female	3,717	2.7	61.6%

U.S.A. Suicide Rates by Age (Rates per 100,000 population)										10 Leading Causes of Death in the U.S.A., 1998 (total of 2,337,256 deaths; 864.7 rate)		
Age	1990	1991	1992	1993	1994	1995	1996	1997	1998	Rank & Cause of Death	Rate	Deaths
5-14	0.8	0.7	0.9	0.9	0.9	0.9	0.8	0.8	0.5	1 Diseases of the heart	268.2	724,859
15-24	13.2	13.1	13.0	13.5	13.8	13.3	12.0	11.4	11.1	2 Malignant neoplasms	200.3	541,532
25-34	15.2	15.2	14.5	15.1	15.4	15.4	14.5	14.3	13.8	3 Cerebrovascular diseases	54.6	158,448
35-44	15.3	14.7	15.1	15.1	15.3	15.2	15.5	15.3	15.4	4 Chronic obstructive pulmonary di	41.7	112,584
45-54	14.8	15.5	14.7	14.5	14.4	14.6	14.9	14.7	14.8	5 Accidents	36.2	97,835
55-64	16.0	15.4	14.8	14.6	13.4	13.3	13.7	13.5	13.1	6 Pneumonia & influenza	34.0	91,871
65-74	17.9	16.9	16.5	16.3	15.3	15.8	15.0	14.4	14.1	7 Diabetes mellitus	24.0	64,751
75-84	24.9	23.5	22.8	22.3	21.3	20.7	20.0	19.3	19.7	8 Suicide	11.3	30,575
85+	22.2	24.0	21.9	22.8	23.0	21.6	20.2	20.8	21.0	9 Nephritis, nephrosis	9.7	26,182
65+	20.5	19.7	19.1	19.0	18.1	18.1	17.3	16.8	16.9	10 Chronic liver disease and cirrhosis	9.3	25,192
Total	12.4	12.7	12.0	12.1	12.0	11.9	11.6	11.4	11.3	- All other causes (Residual)	171.5	463,427

Old made up 12.7% of 1998 population but committed 19.0% of the suicides.

Young were 13.8% of 1998 population and committed 13.5% of the suicides.

Official data source: Murphy, S.L. (2000). Deaths: Final data for 1998. *National Vital Statistics Report*, 48(11). Hyattsville, MD: National Center for Health Statistics. DHHS Publication No. (PHS) 2000-1120. [Data to be published in the 1998 annual volume of *Vital Statistics of the United States*.]

Population figures source: Table 1, p. 100, of the National Center for Health Statistics (Murphy, 2000) publication above.

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

Suicide Data Page: 1998
31 July 2000 • rev 12 September 2000
Prepared for AAS by John L. McIntosh, Ph.D.

Rate, Number, and Ranking of Suicide for Each U.S.A. State, 1998

Rank-State [Region] ('97 rank)	Rate	Number
01 Nevada [M] (01).....	22.7	397
02 Alaska [P] (02).....	21.0	177
03 Wyoming [M] (04).....	18.1	87
04 Montana [M] (03).....	17.9	158
05 Arizona [M] (08).....	17.2	804
06 New Mexico [M] (05T).....	17.1	297
07 Oregon [P] (09).....	16.6	545
08 Idaho [M] (05T).....	16.4	201
09 Utah [M] (12).....	16.0	336
10 Maine [NE] (37T).....	15.8	196
11 South Dakota [WNC] (07).....	15.6	115
12 Colorado [M] (10).....	15.4	611
13 Florida [SA] (14).....	14.6	2,172
13 Vermont [NE] (21T).....	14.6	86
15 Oklahoma [WSC] (11).....	14.1	471
16 Tennessee [ESC] (16).....	13.7	744
17 Arkansas [WSC] (15).....	13.6	344
18 Kentucky [ESC] (19T).....	13.4	526
19 Alabama [ESC] (29T).....	13.1	569
20 New Hampshire [NE] (32T).....	13.0	154
21 West Virginia [SA] (13).....	12.8	232
21 Missouri [WNC] (17).....	12.8	698
23 Washington [P] (18).....	12.4	708
23 Kansas [WNC] (24).....	12.4	325
25 Nebraska [WNC] (39T).....	12.3	204
26 Virginia [SA] (35).....	12.2	827
27 Mississippi [ESC] (21T).....	12.0	329
28 Indiana [ENC] (21T).....	11.8	699
29 South Carolina [SA] (34).....	11.7	449
30 Iowa [WNC] (26T).....	11.5	329
31 North Carolina [SA] (25).....	11.4	857
31 Pennsylvania [MA] (31).....	11.4	1,370
31 Wisconsin [ENC] (36).....	11.4	594
34 North Dakota [WNC] (19T).....	11.3	72
U.S.A. TOTAL.....	11.3	30,575
35 Louisiana [WSC] (26T).....	11.0	480
36 Georgia [SA] (26T).....	10.8	822
36 Texas [WSC] (37T).....	10.8	2,133
38 California [P] (39T).....	10.5	3,415
39 Michigan [ENC] (41).....	9.9	969
39 Ohio [ENC] (43T).....	9.9	1,108
41 Hawaii [P] (32T).....	9.7	116
41 Maryland [SA] (42).....	9.7	497
41 Minnesota [WNC] (43T).....	9.7	459
44 Delaware [SA] (29T).....	9.1	68
45 Rhode Island [NE] (49T).....	8.7	86
46 Illinois [ENC] (47T).....	8.6	1,036
47 Massachusetts [NE] (45).....	8.2	506
47 Washington, DC [SA] (51).....	8.2	43
49 Connecticut [NE] (46).....	7.8	257
50 New York [MA] (47T).....	7.5	1,364
51 New Jersey [MA] (49T).....	7.2	581

Caution: Annual fluctuations in state levels combined with often relatively small populations can make these data highly variable. The use of several years' data is preferable to conclusions based on single years alone.

Region [Abbreviation]	Rate	Number
Mountain [M].....	17.2	2,891
East South Central [ESC].....	13.2	2,168
South Atlantic [SA].....	12.2	5,967
West North Central [WNC].....	11.8	2,202
West South Central [WSC].....	11.4	3,428
Pacific [P].....	11.3	4,913
Nation.....	11.3	30,575
East North Central [ENC].....	10.0	4,406
New England [NE].....	9.6	1,285
Middle Atlantic [MA].....	8.7	3,315

1998

Source: Murphy, S.L. (2000). Deaths: Final data for 1998. *National Vital Statistics Report*, 48(11). Hyattsville, MD: National Center for Health Statistics. DHHS Publication No. (PHS) 2000-1120. (p. 86, Table 26).
[data are by place of residence]
[Suicide = ICD-9 Codes E950-E959]

Note: All rates are per 100,000 population.

* Including the District of Columbia.

Suicide State Data Page: 1998
31 July 2000 • rev 3 August 2000

Prepared by John L. McIntosh, Ph.D. for



**American Association
of Suicidology**

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*"to understand and prevent suicide
as a means of promoting human well-being"*

Visit the AAS website at:

<http://www.suicidology.org>

For other suicide data, and an archive of state data, visit the website below and click on the "Recent Suicide Statistics" link:
<http://www.iusb.edu/~jmcintos/>

**The Surgeon General's
Call To Action
To Prevent Suicide
1999**



**Department of Health and Human Services
U.S. Public Health Service**

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U.S. Public Health Service, *The Surgeon General's Call to Action to Prevent Suicide*. Washington, DC: 1999.

A Letter From The Surgeon General **U.S. Department of Health and Human Services**

Suicide is a serious public health problem. In 1996, the year for which the most recent statistics are available, suicide was the ninth leading cause of mortality in the United States, responsible for nearly 31,000 deaths. This number is more than 50% higher than the number of homicides in the United States in the same year (around 20,000 homicides in 1996).¹ Many fail to realize that far more Americans die from suicide than from homicide. Each year in the United States, approximately 500,000 people require emergency room treatment as a result of attempted suicide.² Suicidal behavior typically occurs in the presence of mental or substance abuse disorders - illnesses that impose their own direct suffering.³⁻⁵ Suicide is an enormous trauma for millions of Americans who experience the loss of someone close to them.⁶ The nation must address suicide as a significant public health problem and put into place national strategies to prevent the loss of life and the suffering suicide causes.

In 1996, the World Health Organization (WHO), recognizing the growing problem of suicide worldwide, urged member nations to address suicide. Its document, *Prevention of Suicide: Guidelines for the Formulation and Implementation of National Strategies*⁷, motivated the creation of an innovative public/private partnership to seek a national strategy for the United States. This public/private partnership included agencies in the U.S. Department of Health and Human Services, encompassing the Centers for Disease Control and Prevention (CDC), the Health Resources and Services Administration (HRSA), the Indian Health Service (IHS), the National Institute of Mental Health (NIMH), the Office of the Surgeon General, and the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Suicide Prevention Advocacy Network (SPAN), a public grassroots advocacy organization made up of suicide survivors (persons close to someone who completed suicide), attempters of suicide, community activists, and health and mental health clinicians.

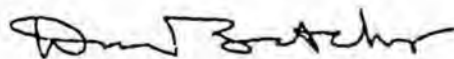
An outgrowth of this collaborative effort was a jointly sponsored national conference on suicide prevention convened in Reno, Nevada, in October 1998. Conference participants included researchers, health and mental health clinicians, policy makers, suicide survivors, and community activists and leaders. They engaged in careful analysis of what is known and unknown about suicide and its potential responsiveness to a public health model emphasizing suicide prevention.

This *Surgeon General's Call To Action* introduces a blueprint for addressing suicide – Awareness, Intervention, and Methodology, or AIM – an approach derived from the collaborative deliberations of the conference participants. As a framework for suicide prevention, AIM includes 15 key recommendations that were refined from consensus and evidence-based findings presented at the Reno conference. Recognizing that mental and substance abuse disorders confer the greatest risk for suicidal behavior, these recommendations suggest an important approach to preventing suicide and injuries from suicidal behavior by addressing the problems of undetected and undertreated mental and substance abuse disorders in conjunction with other public health approaches.

These recommendations and their supporting conceptual framework are essential steps toward a comprehensive **National Strategy for Suicide Prevention**. Other necessary elements will include constructive public health policy, measurable overall objectives, ways to monitor and evaluate progress toward these objectives, and provision of resources for groups and agencies identified to carry out the recommendations. The nation needs to move forward with these crucial recommendations and support continued efforts to improve the scientific bases of suicide prevention.

Many people, from public health leaders and mental and substance abuse disorder health experts to community advocates and suicide survivors, worked together in developing and proposing AIM for the American public. AIM and its recommendations chart a course for suicide prevention action now as well as serve as the foundation for a more comprehensive **National Strategy for Suicide Prevention** in the future. Together, they represent a critical component of a broader initiative to improve the mental health of the nation. I endorse the ongoing work necessary to complete a **National Strategy** because I believe that such a coordinated and evidence-based approach is the best way to use our resources to prevent suicide in America.

But even the most well-considered plan accomplishes nothing if it is not implemented. To translate AIM into action, each of us, whether we play a role at the federal, state, or local level, must turn these recommendations into programs best suited for our own communities. We must act now. We cannot change the past, but together we can shape a different future.



David Satcher, M.D., Ph.D.
Assistant Secretary for Health
and Surgeon General

Suicide as a Public Health Problem

On average, 85 Americans die from suicide each day. Although more females attempt suicide than males, males are at least four times more likely to die from suicide.^{1,8} Firearms are the most common means of suicide among men and women, accounting for 59% of all suicide deaths.¹

Over time, suicide rates for the general population have been fairly stable in the United States.⁹ Over the last two decades, the suicide rate has declined from 12.1 per 100,000 in 1976 to 10.8 per 100,000 in 1996.¹⁰ However, the rates for various age, gender and ethnic groups have changed substantially. Between 1952 and 1996, the reported rates of suicide among adolescents and young adults nearly tripled.^{1,11} From 1980 to 1996, the rate of suicide among persons aged 15-19 years increased by 14% and among persons aged 10-14 years by 100%. Among persons aged 15-19 years, firearms-related suicides accounted for 96% of the increase in the rate of suicide since 1980. For young people 15-24 years old, suicide is currently the third leading cause of death, exceeded only by unintentional injury and homicide.¹² More teenagers and young adults die from suicide than from cancer, heart disease, AIDS, birth defects, stroke, pneumonia and influenza, and chronic lung disease *combined*. During the past decade, there have also been dramatic and disturbing increases in reports of suicide among children. Suicide is currently the fourth leading cause of death among children between the ages of 10 and 14 years.¹⁰

Suicide remains a serious public health problem at the other end of the age spectrum, too. Suicide rates increase with age and are highest among white American males aged 65 years and older. Older adult suicide victims, when compared to younger suicide victims, are more likely to have lived alone, have been widowed, and to have had a physical illness.^{13,14} They are also more likely to have visited a health care professional shortly before their suicide and thus represent a missed opportunity for intervention.¹⁵

Other population groups in this country have specific suicide prevention needs as well. Many communities of Native Americans and Alaskan Natives long have had elevated suicide rates.^{16,17} Between 1980 and 1996, the rate of suicide among African American males aged 15-19 years increased 105% and almost 100% of the increase in this group is attributable to the use of firearms.¹⁸

It is generally agreed that not all deaths that are suicides are reported as such. For example, deaths classified as homicide or accidents, where individuals may have intentionally put themselves in harm's way are not included in suicide rates.¹⁹⁻²¹

Compounding the tragedy of loss of life, suicide evokes complicated and uncomfortable reactions in most of us. Too often, we blame the victim and stigmatize the surviving family members and friends. These reactions add to the survivors' burden of hurt, intensify their isolation, and shroud suicide in secrecy. Unfortunately, secrecy and silence diminish the accuracy and amount of information available about persons who have completed suicide — information that might help prevent other suicides.

Methodology

Developing Recommendations for a National Strategy for Suicide Prevention

Developing and implementing a **National Strategy for Suicide Prevention** should achieve a significant, measurable, and sustained reduction in suicidal behaviors. The action steps presented in this document were prioritized from among a variety of recommendations developed through a public-private collaboration of nongovernmental organizations, federal and state governmental agencies, corporations and foundations, and public health/health/mental health experts.

Before the Reno Conference, experts evaluated research studies, programs, policies, and best interventions to prevent suicide among five U.S. population groups known to be at high risk of suicide. Those identified as being at increased risk were youth, the medically ill, specific population groups, persons with mental and substance abuse disorders, and the elderly. Following review of the evidence by a second expert, the lead expert extracted recommendations for suicide prevention. In extracting recommendations, experts were instructed to consider the robustness of the available data; an intervention's likelihood of reducing suicide; its perceived suitability for implementation in the real world; and estimates of the lead-time to put the recommendation into practice and produce its intended effect. They were also asked to consider the ethical implications and cultural appropriateness of each recommendation.

Those experts' draft recommendations were brought to the Reno conference. A broad cross section of conference participants and a

highly varied expert panel were identified to work with the recommendations and evaluate each one. The panel and the invited conference participants represented diverse areas of expertise and included researchers, suicide survivors, persons who had attempted suicide, public health leaders, community volunteers, clinicians, educators, consumers of mental health services, and corporate/nonprofit advocates. Financial support was made available so that socioeconomic status would not exclude panelists and participants who wanted to contribute from attending the conference. The Regional Health Administrators of the U.S. Public Health Service served as facilitators in working with over 400 participants to refine recommendations during the conference. The expert panel received over 700 written comments from participants during the course of their deliberations.

The expert panel's recommendations were derived from a rigorous review of suicide and suicide prevention research. Existing suicide research is strongest in the identification of risk factors, particularly mental and substance abuse disorders, less developed in categorizing protective factors, and only beginning to analyze the mutual interactions among risk and protective factors. Some treatments for mental and substance abuse disorders have been associated with a reduction in suicidal behaviors.²²⁻³⁰ Further research is needed to determine whether these benefits will occur if treatments are offered to groups outside the small populations that were studied.

The recommendations the panel developed include past and current initiatives, programs, and interventions. Other recommendations pragmatically extend findings from existing suicide and suicide prevention research into proposed applications. Suicide prevention experts from multiple disciplines endorsed these proposed recommendations as having the greatest potential for effectiveness.

By the end of the conference, the expert panel had advanced 81 recommendations for consideration for inclusion in a **National Strategy for Suicide Prevention**. These recommendations were posted on the SPAN Web site to allow a period of further reflection and public comment. The CDC developed a tool for priority ranking the 81 recommendations. Respondents from all interested sectors prioritized the recommendations using criteria of feasibility, necessity, clarity, and likelihood of being funded. Recommendations with the highest priority scores and broadest support were combined and edited to serve as the essential first steps of an action agenda for suicide prevention.

Results

AIM to Prevent Suicide

This *Surgeon General's Call to Action* introduces an initial blueprint for reducing suicide and the associated toll that mental and substance abuse disorders take in the United States. As both evidence-based and highly prioritized by leading experts, these 15 key recommendations listed below should serve as a framework for immediate action. These recommended first steps are categorized as Awareness, Intervention, and Methodology, or AIM.

Awareness: Appropriately broaden the public's awareness of suicide and its risk factors

Intervention: Enhance services and programs, both population-based and clinical care

Methodology: Advance the science of suicide prevention.

Awareness: Appropriately broaden the public's awareness of suicide and its risk factors

- Promote public awareness that suicide is a public health problem and, as such, many suicides are preventable. Use information technology appropriately to make facts about suicide and its risk factors and prevention approaches available to the public and to health care providers.
- Expand awareness of and enhance resources in communities for suicide prevention programs and mental and substance abuse disorder assessment and treatment.
- Develop and implement strategies to reduce the stigma associated with mental illness, substance abuse, and suicidal behavior and with seeking help for such problems.

Intervention: Enhance services and programs, both population-based and clinical care

- Extend collaboration with and among public and private sectors to complete a **National Strategy for Suicide Prevention**.
- Improve the ability of primary care providers to recognize and treat depression, substance abuse, and other major mental illnesses associated with suicide risk. Increase the referral to specialty care when appropriate.

- Eliminate barriers in public and private insurance programs for provision of quality mental and substance abuse disorder treatments and create incentives to treat patients with coexisting mental and substance abuse disorders.

- Institute training for all health, mental health, substance abuse and human service professionals (including clergy, teachers, correctional workers, and social workers) concerning suicide risk assessment and recognition, treatment, management, and aftercare interventions.

- Develop and implement effective training programs for family members of those at risk and for natural community helpers on how to recognize, respond to, and refer people showing signs of suicide risk and associated mental and substance abuse disorders. Natural community helpers are people such as educators, coaches, hairdressers, and faith leaders, among others.

- Develop and implement safe and effective programs in educational settings for youth that address adolescent distress, provide crisis intervention and incorporate peer support for seeking help.

- Enhance community care resources by increasing the use of schools and workplaces as access and referral points for mental and physical health services and substance abuse treatment programs and provide support for persons who survive the suicide of someone close to them.

- Promote a public/private collaboration with the media to assure that entertainment and news coverage represent balanced and informed portrayals of suicide and its associated risk factors including mental illness and substance abuse disorders and approaches to prevention and treatment.

Methodology: Advance the science of suicide prevention

- Enhance research to understand risk and protective factors related to suicide, their interaction, and their effects on suicide and suicidal behaviors. Additionally, increase research on effective suicide prevention programs, clinical treatments for suicidal individuals, and culture-specific interventions.

- Develop additional scientific strategies for evaluating suicide prevention interventions and ensure that evaluation components are included in all suicide prevention programs.

- Establish mechanisms for federal, regional, and state inter-agency public health collaboration toward improving monitoring systems for suicide and suicidal behaviors and develop and promote standard terminology in these systems.

- Encourage the development and evaluation of new prevention technologies, including firearm safety measures, to reduce easy access to lethal means of suicide.

Discussion

Risk and Protective Factors

Suicide risk and protective factors and their interactions form the empirical base for suicide prevention. Risk factors are associated with a greater potential for suicide and suicidal behavior while protective factors are associated with reduced potential for suicide.³¹⁻³³

Substantial age, gender, ethnic, and cultural variations in suicide rates provide opportunities to understand the different roles of risk and protective factors among these groups. Risk and protective factors encompass genetic, neurobiological, psychological, social, and cultural characteristics of individuals and groups and environmental factors such as easy access to firearms.³⁴⁻³⁸ This expanding base of empirical evidence generates promising ideas about what can be changed or modified to prevent suicide.

Clear progress has been made in the scientific understanding of suicide, mental and substance abuse disorders, and in developing interventions to treat these disorders. For example, increased understanding of brain systems regulated by chemicals called neurotransmitters holds promise for understanding the biological underpinnings of depression, anxiety disorders, impulsiveness, aggression, and violent behaviors.³⁹ Much remains to be learned, however, about the common risk factors for mental disorders and substance abuse, suicide and other forms of intentional violence including homicide, domestic violence, and child abuse. Expanding the base of scientific evidence will help in the development of more effective interventions for these harmful behaviors.

Advances in neurobiology and the behavioral sciences and their application in developing effective treatments for mental and substance abuse disorders have generated much hope. Wider public understanding of the science of the brain and behavior can reduce the stigma asso-

ciated with seeking help for mental and substance abuse disorders and consequently may contribute to reducing the risk for suicidal behavior.

Risk Factors

Understanding risk factors can help dispel the myths that suicide is a random act or results from stress alone. Some persons are particularly vulnerable to suicide and suicidal self-injury because they have more than one mental disorder present⁴⁰, such as depression with alcohol abuse⁴¹. They may also be very impulsive and/or aggressive⁴², and use highly lethal methods to attempt suicide. As noted above, the importance of certain risk factors and their combination vary by age, gender, and ethnicity.

The impact of some risk factors can be reduced by interventions (such as providing effective treatments for depressive illness).^{31,43} Those risk factors that cannot be changed (such as a previous suicide attempt) can alert others to the heightened risk of suicide during periods of the recurrence of a mental or substance abuse disorder, or following a significant stressful life event.^{31,44}

Risk factors include:

- Previous suicide attempt
- Mental disorders — particularly mood disorders such as depression and bipolar disorder
- Co-occurring mental and alcohol and substance abuse disorders
- Family history of suicide
- Hopelessness
- Impulsive and/or aggressive tendencies
- Barriers to accessing mental health treatment
- Relational, social, work, or financial loss
- Physical illness
- Easy access to lethal methods, especially guns
- Unwillingness to seek help because of stigma attached to mental and substance abuse disorders and/or suicidal thoughts
- Influence of significant people—family members, celebrities, peers who have died by suicide—both through direct personal contact or inappropriate media representations
- Cultural and religious beliefs—for instance, the belief that suicide is a noble resolution of a personal dilemma
- Local epidemics of suicide that have a contagious influence
- Isolation, a feeling of being cut off from other people

Some lists of warning signs for suicide have been created in an effort to identify and increase the referral of persons at risk. However, the warning signs given are not necessarily risk factors for suicide and may include common behaviors among distressed persons, behaviors that are not specific for suicide. If such lists are applied broadly, for instance in the general classroom setting, they may be counterproductive. In effect, indiscriminate suicide awareness efforts and overly inclusive screening lists may promote suicide as a possible solution to ordinary distress or suggest that suicidal thoughts and behaviors are normal responses to stress.⁴⁵ Efforts must be made to avoid normalizing, glorifying, or dramatizing suicidal behavior, reporting how-to methods, or describing suicide as an understandable solution to a traumatic or stressful life event. Inappropriate approaches could potentially increase the risk for suicidal behavior in vulnerable individuals, particularly youth.^{46,47}

Protective Factors

Protective factors can include an individual's genetic or neurobiological makeup, attitudinal and behavioral characteristics, and environmental attributes.³¹ Measures that enhance resilience or protective factors are as essential as risk reduction in preventing suicide. Positive resistance to suicide is not permanent, so programs that support and maintain protection against suicide should be ongoing.

Protective factors include:

- Effective and appropriate clinical care for mental, physical, and substance abuse disorders
- Easy access to a variety of clinical interventions and support for help seeking
- Restricted access to highly lethal methods of suicide
- Family and community support
- Support from ongoing medical and mental health care relationships
- Learned skills in problem solving, conflict resolution, and nonviolent handling of disputes
- Cultural and religious beliefs that discourage suicide and support self-preservation instincts

The risk factors that lead to suicide (especially mental and substance abuse disorders) and the protective factors that safeguard against it form the conceptual framework for the prevention recommendations developed and presented in this document and in the evolving **National Strategy for Suicide Prevention**.

Identifying and Addressing Risk

Unfortunately, it is difficult to identify particular individuals at greatest risk for suicidal behaviors or completed suicide. Measures to screen the general population for suicide risk lack the precision needed to identify in advance only those people who eventually would die by suicide. Because suicide screening in the general population currently is not feasible, it is especially important for suicide prevention programs to include broader approaches that benefit the whole population as well as efforts focused on smaller, high-risk subgroups that can be identified. Within those subgroups, a different approach to screening — screening programs for specific disorders, like depression, that are associated with suicide — can be used to identify and direct people to highly effective treatments that may lower their risk of suicide.

Often, the suicide prevention efforts in place are directed primarily at improving clinical care for the individual already struggling with suicidal ideas or the individual requiring medical attention for a suicide attempt. Suicide prevention also demands approaches that reduce the likelihood of suicide before vulnerable individuals reach the point of danger. Applying the public health approach to the problem of suicide in the United States will maximize the benefits of efforts and resources for suicide prevention.

The Public Health Approach

Suicide is a public health problem that requires an evidence-based approach to prevention. In concert with the clinical medical approach, which explores the history and health conditions that could lead to suicide in a single individual, the public health approach focuses on identifying and understanding patterns of suicide and suicidal behavior throughout a group or population. The public health approach defines the problem, identifies risk factors and causes of the problem, develops interventions evaluated for effectiveness, and implements such interventions widely in a variety of communities.^{48,49}

Although this description suggests a linear progression from the first step to the last, in reality the steps occur simultaneously and depend on each other. For example, systems for gathering information to define the exact nature of the suicide problem may also be useful in evaluating programs. Similarly, information gained from program evaluation and implementation may lead to new and promising interventions. Public health has traditionally used this model to respond to epidemics of infectious disease. During the past few decades, the

model has also been used to address other problems that are likewise complicated and challenging to prevent, such as chronic disease and injury.

The Public Health Approach Applied to Suicide Prevention

Defining the Problem

The first step includes collecting information about incidents of suicide and suicidal behavior. It goes beyond simple counting. Information is gathered on characteristics of the persons involved, the circumstances of the incidents, events that may have precipitated the act, the adequacy of support and health services received, and the severity and cost of the injuries. This step covers the who, what, when, where, how, and how many of the identified problem.

Identifying Causes and Protective Factors

The second step focuses on why. It addresses risk factors such as depression, alcohol and other drug use, bereavement, or job loss. This step may be used to define groups of people at higher risk for suicide. Many questions remain, however, about the interactive matrix of risk and protective factors in suicide and suicidal behavior and, more importantly, how this interaction can be modified.

Developing and Testing Interventions

The next step involves developing approaches to address the causes and risk factors that have been identified. Testing the effectiveness of each approach is a critical part of this step to ensure that strategies are safe, ethical, and feasible. Pilot testing, which may reveal differences among particular age, gender, ethnic and cultural groups, can help determine for whom a suicide prevention strategy is best fitted.

Implementing Interventions

The final step is to implement interventions that have demonstrated effectiveness in preventing suicide and suicidal behavior. Implementation requires data collection as a means to continue evaluating effectiveness of an intervention. This is essential because an intervention that has been found effective in a clinical trial or academic study may have different outcomes in other settings. Ongoing evalua-

tion builds the evidence base for refining and extending effective suicide prevention programs. Determination of an intervention's cost-effectiveness is another important component of this step. This ensures that limited resources can be used to achieve the greatest benefit.

As interventions for preventing suicide are developed and implemented, communities must consider several key factors. Interventions have a much greater likelihood of success if they involve a variety of services and providers. This requires community leaders to build effective coalitions across traditionally separate sectors, such as the health care delivery system, the mental health system, faith communities, schools, social services, civic groups, and the public health system. Interventions must be adapted to support and reflect the experience of survivors and specific community values, cultures, and standards. They must also be designed to benefit from multi-ethnic and culturally diverse participation from all segments of the community.

As it evolves, America's **National Strategy for Suicide Prevention** must recognize and affirm the value, dignity, and importance of each person. Everyone concerned with suicide prevention shares the responsibility to help change and eliminate the societal conditions and attitudes that often contribute to suicide. Individuals, communities, organizations, and leaders at all levels should collaborate in promoting suicide prevention. Final development of a **National Strategy for Suicide Prevention** and the success of these essential action steps ultimately rest with individuals and communities and institutions and policy makers across the United States.

Implementing AIM as an Action Agenda in Communities

As states and local communities apply the public health approach to AIM recommendations, they must consider both population-based and clinical care initiatives. Their first step is to define and to describe the problem of suicide and its associated risk factors locally and measure their magnitude. Next, causes of the conditions found must be identified. Then, community interventions must be designed to address the identified needs through attention to the causes revealed. Evaluating project effectiveness provides guidance for refining the intervention and expanding benefits to other settings. The following hypothetical descriptions of community suicide prevention activities have been created to illustrate applied public health and clinical management prevention models.

Youth

Recognizing the state's increasing rates of substance abuse and suicide among youth, the state public health director in consultation with the Regional Health Administrator brought together concerned representatives to form a state youth suicide, substance abuse and depression prevention coalition. The coalition members reflected many sectors in the community including suicide survivors, educators, social service agencies, the faith community, businesses, the state cooperative extension programs (4-H), school psychologists, child psychiatrists, the PTA, substance abuse treatment counselors, public officials, and the juvenile justice system. The coalition also established a youth advisory board.

After collecting detailed information on the dimensions of youth substance abuse, depression and suicide in the state and identifying how few school systems had screening, referral, and crisis plans, the coalition formed a multidisciplinary study committee to develop a model suicide prevention plan. A broad array of public and professional organizations in the state studied and endorsed the model plan. A corporate partner from the business community provided a grant to distribute the model plan along with a curriculum guide for natural helpers to identify high-risk youth. As school districts adapted the plan and implemented it locally, followup surveys were conducted to determine patterns of use, satisfaction with the model plan and guide, and impact on substance abuse, depression and suicidal behaviors in communities statewide. Based on evidence collected from the evaluations, the model plan was revised to include more guidance on working with the media to de-sensationalize coverage of suicide, and promote abstinence from substance use as well as encourage youth to seek treatment for both substance abuse and depression.

The Elderly

The public health approach has revealed that suicide rates are highest among the elderly and that most elderly suicide victims are seen by their primary care provider within a few weeks of their suicide and are experiencing a first episode of mild to moderate depression. Recognizing that clinical depression is a highly treatable illness, but treatment has not yet been adequately provided in primary care settings, a state with a large elderly population brought together a group of health professionals and community advocates. Together they devised and supported a pilot program to follow depression screening in the primary care setting with the addition of an on-site nurse or social

worker specializing in depression services. These on-site specialists ensured that those elderly patients who screened positive for depression received depression treatment and follow up from the physician and assessed patient progress so that ongoing treatments could be adjusted to increase their effectiveness. Outcomes for patients in the pilot project were compared to those patients receiving usual treatment in comparable primary care settings. This evaluation provided information to fine tune the program and extend its benefits to other primary care settings in the state.

Advancing a National Suicide Prevention Strategy

The 15 recommendations (AIM) presented in this *Surgeon General's Call to Action* propose a nationwide, collaborative effort to reduce suicidal behaviors, and to prevent premature death due to suicide across the life span. The conceptual framework for AIM incorporates analysis of suicide risk and protective factors and emphasizes the benefits of effectively treating mental and substance abuse disorders. A comprehensive **National Strategy for Suicide Prevention** should include these elements along with supportive government policy, measurable objectives for the **Strategy**, means of monitoring and evaluating progress, and provision of authority and resources to carry out the **Strategy's** recommendations.

To realize success in preventing suicide and suicidal behaviors, collaboration must be fostered on this public health priority across a broad spectrum of agencies, institutions, groups, and representative individuals throughout the country. As additional elements of a comprehensive **Strategy** evolve, the public and prospective implementation partners must also sustain awareness that improved detection and treatment of mental and substance abuse disorders represent a primary approach to suicide prevention. These partners must ensure the availability of evidence-based guidance for communities to develop and refine effective suicide prevention approaches. Likewise, as communities implement approaches to recognize and reduce risk factors to prevent suicide, they must be aware of the dangers of inadvertently glamorizing suicide, and remain vigilant to avoid doing so. Ongoing review of research, policy, and program advances in suicide prevention may expand the number of effective initiatives and interventions for incorporation into the **Strategy**. Work should continue that outlines measurable objectives for an overall **Strategy**, provides mechanisms for tracking these objectives, and develops means of communicating significant progress in preventing suicide and suicidal self-injury.

Conclusion

Americans in communities nationwide can make a significant difference in preventing suicide and suicidal behaviors. The recommendations presented in **AIM** provide a blueprint and call for action now. Programs and activities that are carried out and evaluated today will generate additional recommendations for effective suicide prevention initiatives in the future. Working together locally, in states, and at the federal level to complete and implement a **National Strategy for Suicide Prevention** is an important step in responding to the major public health problem of suicide in the United States.

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