THE BURDEN OF SUICIDE IN WISCONSIN

A SUPPLEMENT TO THE REPORT
THE BURDEN OF INJURY IN WISCONSIN

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THE BURDEN OF SUICIDE IN WISCONSIN

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"Suicide affects an entire community and, because it is a complex issue, it will take a community to work on it."

Pat Derer, President, HOPES
(Helping Others Prevent and Educate about Suicide)

EXECUTIVE SUMMARY

Suicide is a significant public health problem in Wisconsin. Suicidal behavior places a large burden on individuals, families, and communities throughout Wisconsin due to loss of life, disability, emotional and financial toll on family and friends, and lost productivity in the workforce.

This report outlines the burden of the problem by utilizing data from the Violent Injury Reporting System (VIRS) and the Wisconsin Violent Death Reporting System (WVDRS). VIRS was the precursor to the WVDRS system and provides data for the years 2001-2003. WVDRS provides data for the years 2004-2006. The report presents data on trends of suicide by age, sex, education, race, ethnicity, marital status and veteran status as well as circumstance information surrounding the suicides. In addition to providing data on suicides, the number of suicide attempts and economic factors such as years per life lost and hospitalization and emergency department visit costs are given.

Suicide is preventable. One way to organize a comprehensive strategy for prevention is to use the the public health approach. This approach to addressing the burden of suicide calls for:

- Defining the problem using data.
- Identifying risk and protective factors.
- Developing and testing prevention strategies.
- Ensuring widespread adoption.
- Evaluating within the community.

This report is organized into five sections:
Suicidal Behavior--provides an overview of the problem and the costs associated, including suicides, suicide attempts resulting in hospitalization or emergency department visit, and county-level data;
Demographics--provides characteristics about those who died by suicide such as age, sex, and marital status;
Circumstances--provides information about the death and the victim;
Prevention Strategies--outlines ways to prevent suicide in your community;
Technical Notes--provides information on the data sources used for this report and an explanation of commonly used terms in the report.

KEY FINDINGS

- The suicide rate in Wisconsin remained relatively constant from 2001-2006, with an average of 650 suicides per year. These deaths resulted in an average of 20,000 years of potential life lost each year.
- The greatest number of suicides occurred in individuals aged 35-54, while the greatest number of hospitalizations and emergency department visits for self-inflicted injuries occurred in younger individuals, aged 15-24.
- The cost of inpatient hospitalizations and emergency department visits due to self-inflicted injury was over $64 million in 2006 alone.
- Veterans accounted for one out of every five suicides in Wisconsin.
- American Indian/Alaskan Native groups had the highest rate of suicide followed by Whites, Blacks, Asian/Pacific Islanders and Hispanics.
- Firearms were the most frequently used method of suicide in Wisconsin.
- Of those with known mental health circumstances, 66% of victims had a current depressed mood and 51% had a current mental health problem.
- One out of ever four suicide victims had a history of attempts.
- Over one third of all victims had alcohol present in their system at the time of death.

SUICIDAL BEHAVIOR

Suicides and Suicide Attempts
Suicides remained relatively constant from 2001-2006 (Table 1). While an average of 650 individuals lost their lives due to suicide each year from 2001-2006, those deaths make up only a portion of the burden. Suicide attempts are measured by the number of inpatient hospitalizations and emergency department visits for self-inflicted injuries.

The rates of these events are many times higher than the rates of suicide deaths (Figure 1). There are nearly eight inpatient hospitalizations for every one suicide death. Keeping track of suicide attempts is important for multiple reasons:

- An encounter with the medical system offers an opportunity for prevention.
- The cost of medical treatment for suicide attempts was over $64 million in 2006 alone (Table 12). Increased prevention may reduce the need for medical treatment, therefore reducing costs.
- Circumstance information from 2001-2006 indicated that at least 25% of victims had attempted suicide previously (Table 22).

The age pattern between suicides and suicide attempts is slightly different. The greatest number of hospitalizations and emergency department visits occurred in the 15-24 age group (Tables 8 and 9), whereas the greatest number of suicide deaths occurred in older individuals between 35-54 (Table 14).

While there were approximately four male suicide deaths for every one female suicide death, the pattern of suicide attempts was different. The rate of female inpatient hospitalizations and emergency department visits was almost twice as high as it was for males (Tables 10 and 11). Men tend to use more lethal means when attempting suicide, which is one reason there are more suicides in males than females.

County Information
Data on suicides, hospitalizations and emergency department visits for self-inflicted injury are presented for each county in Tables 2, 3, and 4. County is based on county of residence for decedent or patient rather than county where the injury occurred. More specific information regarding the burden of suicide for each county is being developed.

Years of Potential Life Lost (YPLL)
YPLL is a measure to describe the amount of years "lost" due to premature death (defined as age 75 in this report). Table 5 presents this measure of the burden of suicide. The YPLL rate increased slightly during years 2003-2004; however, this has been on the decline since. This was likely due to the decrease in youth suicides over time in the state. Table 7 provides a comparison between the YPLL rate due to suicide and other causes of death in Wisconsin. The suicide YPLL rate was higher than that of homicide, diabetes mellitus and human immunodeficiency virus (HIV) disease combined.

Youth Risk Behavior Survey (YRBS)
The Wisconsin YRBS is used to monitor risk behaviors, including suicide ideation and attempts, of high school students in the State. Several questions from this survey are provided in Table 13. This sample-based survey is administered by the Wisconsin Department of Public Instruction. More information may be found at: www.dpi.wi.gov/sspw/yrbsindx.html.

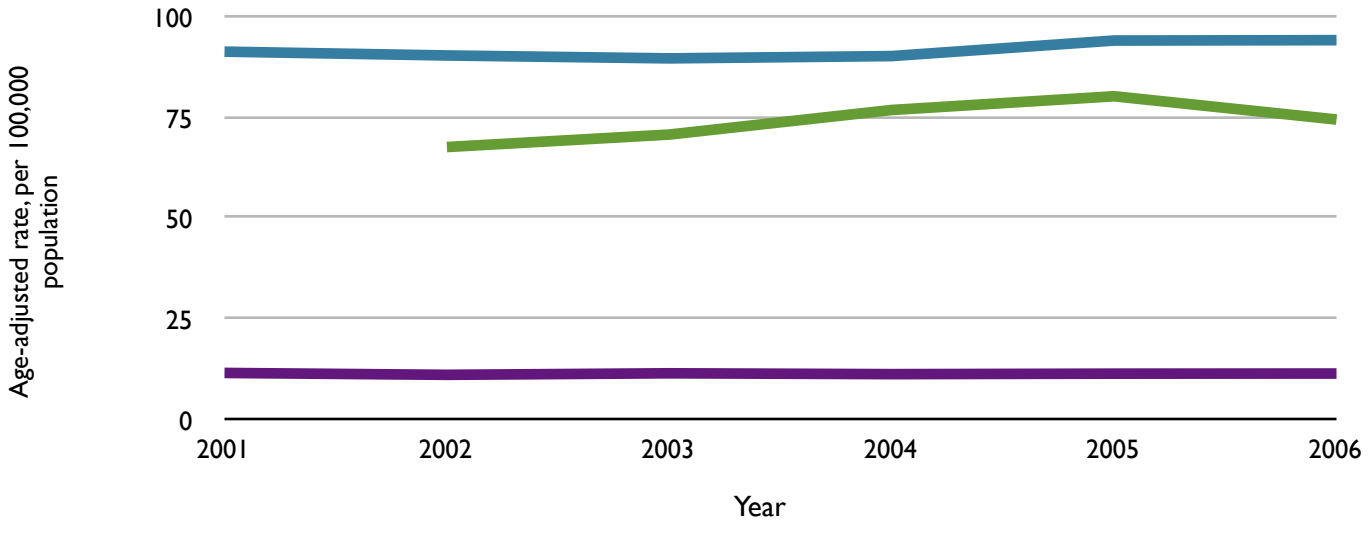
SUICIDAL BEHAVIOR

Table 1. Numbers and age-adjusted rates (per 100,000 population) of suicides, inpatient hospitalizations, and emergency department visits due to self-inflicted injuries, Wisconsin residents and non-residents, 2001-2006.

	Year											
	2001‡		*2002*		*2003*		*2004*		*2005*		*2006*	
	Number	*Rate*	*Number*	*Rate*	*Number*	*Rate*	*Number*	*Rate*	*Number*	*Rate*	*Number*	*Rate*
Deaths	648	11.8	630	11.3	654	11.7	647	11.5	657	11.6	660	11.6
Inpatient Hospitalizations	5,007	91.6	4,984	90.6	4,959	89.9	5,022	90.5	5,267	94.3	5,277	94.4
Emergency Department Visits	NA		3,744	67.9	3,915	71.0	4,284	77.1	4,474	80.5	4,143	74.7

‡*Emergency department data are not available for 2001.*

Figure 1. Age-adjusted rates (per 100,000 population) of suicides, inpatient hospitalizations, and emergency department (ED) visits due to self-inflicted injuries, Wisconsin, 2001-2006 (see Table 1 for corresponding figure data).



SUICIDAL BEHAVIOR

Table 2. Suicides, by Wisconsin county of residence, 2001-2006 (aggregate).

County	*Number*	*Rate‡*
Adams	21	16.9
Ashland	11	10.9‡
Barron	32	11.6
Bayfield	13	14.1‡
Brown	167	11.8
Buffalo	16	19.1‡
Burnett	16	16.3‡
Calumet	24	9.1
Chippewa	56	15.9
Clark	17	8.3‡
Columbia	41	12.6
Crawford	13	12.5‡
Dane	304	11.2
Dodge	57	10.8
Door	30	17.3
Douglas	48	18.2
Dunn	24	9.6
Eau Claire	62	10.8
Florence	3	9.7‡
Fond du Lac	88	14.8
Forest	8	13.2‡
Grant	38	12.6
Green	29	13.8
Green Lake	17	14.7‡
Iowa	17	12.0‡

County	*Number*	*Rate‡*
Iron	2	4.9‡
Jackson	27	22.9
Jefferson	73	15.6
Juneau	17	11.0‡
Kenosha	128	13.6
Kewaunee	13	10.4‡
La Crosse	77	11.7
Lafayette	8	8.2‡
Langlade	17	12.4‡
Lincoln	29	16.0
Manitowoc	57	11.4
Marathon	97	12.5
Marinette	40	15.2
Marquette	25	27.8
Menominee	4	14.4‡
Milwaukee	604	10.8
Monroe	37	14.5
Oconto	24	10.7
Oneida	25	11.1
Outagamie	98	9.7
Ozaukee	53	10.4
Pepin	8	17.9‡
Pierce	22	9.5
Polk	30	11.4
Portage	54	13.2

County	*Number*	*Rate‡*
Price	14	14.8‡
Racine	137	11.9
Richland	8	7.3‡
Rock	102	10.9
Rusk	10	10.8‡
St. Croix	35	8.0
Sauk	57	16.4
Sawyer	18	17.7‡
Shawano	42	16.8
Sheboygan	100	14.5
Taylor	15	12.6‡
Trempealeau	21	12.6
Vernon	29	16.7
Vilas	18	13.7‡
Walworth	70	12.0
Washburn	7	7.0‡
Washington	67	9.0
Waukesha	182	8.1
Waupaca	33	10.4
Waushara	18	12.3‡
Winnebago	118	12.2
Wood	54	11.8
Out of state or unknown	20	--

‡Rates based on numbers of 20 or less are considered unstable due to random chance and should be interpreted with caution.

SUICIDAL BEHAVIOR

Table 3. Inpatient hospitalizations due to self-inflicted injury, by Wisconsin county of residence, 2001-2006 (aggregate).

County	*Number*	*Rate‡*
Adams	79	63.4
Ashland	270	267.0
Barron	198	71.5
Bayfield	139	150.3
Brown	1,596	112.3
Buffalo	48	57.3
Burnett	31	31.6
Calumet	142	53.9
Chippewa	350	99.4
Clark	147	71.7
Columbia	271	83.0
Crawford	101	97.3
Dane	2,747	101.5
Dodge	473	89.6
Door	113	65.3
Douglas	15	5.7‡
Dunn	219	87.7
Eau Claire	919	160.1
Florence	12	38.9‡
Fond du Lac	669	112.3
Forest	116	191.3
Grant	200	66.5
Green	177	84.3
Green Lake	75	64.9
Iowa	79	56.0
Iron	33	80.2
Jackson	117	99.2
Jefferson	370	78.8
Juneau	130	84.1
Kenosha	845	89.9
Kewaunee	85	68.2
La Crosse	1,065	162.5
Lafayette	61	62.4
Langlade	71	56.1
Lincoln	132	72.9
Manitowoc	566	112.9
Marathon	396	51.0
Marinette	228	86.5
Marquette	78	86.7
Menominee	44	158.9
Milwaukee	4,258	75.8
Monroe	295	115.7
Oconto	215	95.4
Oneida	323	143.4
Outagamie	911	90.0
Ozaukee	363	71.1
Pepin	29	64.7
Pierce	106	45.8
Polk	125	47.6
Portage	497	121.0
Price	68	71.9
Racine	1,467	126.9
Richland	87	79.9
Rock	772	82.5
Rusk	69	74.7
St. Croix	82	18.8
Sauk	285	82.1
Sawyer	186	183.3
Shawano	211	84.5
Sheboygan	1,260	182.9
Taylor	69	58.1
Trempealeau	156	93.9
Vernon	122	70.4
Vilas	196	148.7
Walworth	350	59.9
Washburn	53	52.9
Washington	360	48.5
Waukesha	1,282	57.1
Waupaca	213	67.1
Waushara	130	88.7
Winnebago	1,298	134.6
Wood	426	93.4
Out of state	845	--

‡Rates based on numbers of 20 or less are considered unstable due to random chance and should be interpreted with caution.

SUICIDAL BEHAVIOR

Table 4. Emergency department visits due to self-inflicted injury, by Wisconsin county of residence, 2002-2006 (aggregate).

County	*Number*	*Rate‡*	*County*	*Number*	*Rate‡*	*County*	*Number*	*Rate‡*
Adams	83	79.5	Iron	4	11.7 ‡	Price	33	41.9
Ashland	44	52.2	Jackson	63	63.9	Racine	426	44.1
Barron	109	47.1	Jefferson	400	101.8	Richland	75	82.6
Bayfield	13	16.8‡	Juneau	146	112.4	Rock	661	84.5
Brown	1,179	99.0	Kenosha	613	77.8	Rusk	22	28.6
Buffalo	9	12.8‡	Kewaunee	53	50.9	St. Croix	127	34.3
Burnett	42	51.2	La Crosse	311	56.8	Sauk	165	56.7
Calumet	48	21.7	Lafayette	23	28.2	Sawyer	37	43.5
Chippewa	88	29.7	Langlade	70	66.3	Shawano	175	83.9
Clark	77	45.0	Lincoln	100	66.1	Sheboygan	123	21.4
Columbia	277	101.4	Manitowoc	172	41.2	Taylor	41	41.4
Crawford	29	33.5	Marathon	297	45.7	Trempealeau	59	42.5
Dane	1,762	77.6	Marinette	178	81.0	Vernon	64	44.2
Dodge	259	58.7	Marquette	59	78.4	Vilas	81	73.4
Door	59	40.8	Menominee	44	190.7	Walworth	369	75.3
Douglas	20	9.1	Milwaukee	6,482	138.7	Washburn	50	59.6
Dunn	123	58.9	Monroe	59	27.7	Washington	140	22.5
Eau Claire	144	30.0	Oconto	163	86.3	Waukesha	1,178	62.7
Florence	2	7.8 ‡	Oneida	60	31.9	Waupaca	175	66.0
Fond du Lac	345	69.4	Outagamie	349	41.1	Waushara	49	39.8
Forest	2	4.0 ‡	Ozaukee	137	32.1	Winnebago	551	68.3
Grant	106	42.3	Pepin	11	29.3‡	Wood	326	85.8
Green	94	53.4	Pierce	39	20.1	Out of state	499	--
Green Lake	54	56.0	Polk	74	33.6			
Iowa	95	80.5	Portage	162	47.3			

‡Rates based on numbers of 20 or less are considered unstable due to random chance and should be interpreted with caution.

Table 5. Years of potential life lost (YPLL) and YPLL rate per 100,00 due to suicide, Wisconsin, 2001-2006.

	Year					
	2001	*2002*	*2003*	*2004*	*2005*	*2006*
Years of potential life lost (YPLL)	19,733	19,735	20,136	21,238	20,496	20,652
YPLL rate per 100,000	389	387	392	409	394	394

Table 6. Years of potential life lost by common causes of death, Wisconsin, 2001-2006.

	Year					
	2001	*2002*	*2003*	*2004*	*2005*	*2006*
Malignant neoplasms	76,067	76,678	74,683	73,811	77,494	75,639
Heart disease	49,774	49,366	48,615	44,828	44,086	44,032
Motor vehicle crashes	28,252	29,210	30,585	27,395	30,464	26,826
Suicide	**19,733**	**19,735**	**20,136**	**21,138**	**20,496**	**20,652**
Homicide	9,719	8,213	8,819	6,615	10,237	8,471
Diabetes	6,732	7,599	7,763	7,559	7,802	6,634
HIV	2,284	2,518	2,087	1,416	1,687	1,538

Table 7. Rate of years of potential life lost by common causes of death, Wisconsin, 2001-2006.

	Year					
	2001	*2002*	*2003*	*2004*	*2005*	*2006*
Malignant neoplasms	1,500	1,503	1,455	1,428	1,489	1,444
Heart disease	981	968	947	867	847	841
Motor vehicle crashes	557	573	596	530	585	512
Suicide	**389**	**387**	**392**	**409**	**394**	**394**
Homicide	192	161	172	128	197	162
Diabetes	133	149	151	146	150	127
HIV	45	49	41	27	32	29

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Table 8. Inpatient hospitalizations due to self-inflicted injury, by age, Wisconsin 2001-2006.

	Year											
	2001		2002		2003		2004		2005		2006	
Age Group	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
5-14	242	31.4	235	31.0	248	32.9	298	40.7	267	37.1	245	33.7
15-24	1,639	207.7	1,613	200.4	1,517	186.4	1,591	194.1	1,625	198.0	1,613	198.5
25-34	1,025	147.2	1,020	146.9	1,027	148.9	1,027	146.9	1,003	141.7	1,051	148.2
35-44	1,192	136.3	1,239	142.9	1,148	134.8	1,131	134.0	1,257	151.1	1,136	139.6
45-54	626	81.4	589	74.8	689	85.4	675	81.3	720	84.6	842	97.8
55-64	163	34.1	169	33.7	185	35.2	186	33.7	251	43.3	267	44.3
65-74	68	19.3	62	17.7	73	20.8	68	19.4	72	20.5	65	18.1
75-84	30	11.8	44	17.2	52	20.2	36	14.0	48	18.5	41	15.8
85+	21	20.9	13	12.6‡	20	18.7	10	9.0‡	24	20.7	17	15.2‡

‡Rates based on numbers of 20 or less are considered unstable due to random chance and should be interpreted with caution.

Table 9. Emergency department visits due to self-inflicted injury, by age, Wisconsin 2002-2006.

	Year											
	2001		2002		2003		2004		2005		2006	
Age Group	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
5-14	NA		236	31.2	284	37.7	356	48.6	321	44.6	270	37.2
15-24	NA		1,639	203.6	1,624	199.6	1,808	220.5	1,833	223.4	1,734	213.4
25-34	NA		788	113.5	793	115.0	840	120.1	1,032	145.8	871	122.8
35-44	NA		714	82.3	809	95.0	766	90.8	777	93.4	743	91.3
45-54	NA		283	35.9	311	38.5	385	46.4	393	46.2	395	45.9
55-64	NA		49	9.8	73	13.9	82	14.8	82	14.1	89	14.8
65-74	NA		15	4.3‡	10	2.9‡	23	6.6	18	5.1‡	26	7.2
75-84	NA		13	5.1‡	7	2.7‡	11	4.3‡	8	3.1‡	9	3.5‡
85+	NA		5	4.8‡	3	2.8‡	7	6.3‡	4	3.4‡	3	2.7‡

‡Rates based on numbers of 20 or less are considered unstable due to random chance and should be interpreted with caution.

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Table 10. Inpatient hospitalizations due to self-inflicted injuries, by sex, Wisconsin 2001-2006.

	Year											
	2001		*2002*		*2003*		*2004*		*2005*		*2006*	
	Number	*Rate*	*Number*	*Rate*	*Number*	*Rate*	*Number*	*Rate*	*Number*	*Rate*	*Number*	*Rate*
Males	1,806	65.8	1,807	65.3	1,878	67.6	1,771	62.9	1,857	65.8	1,913	67.4
Females	3,201	118.3	3,177	116.8	3,081	113.0	3,251	118.8	3,410	124.0	3,364	122.6

Table 11. Emergency department visits due to self-inflicted injuries, by sex, Wisconsin 2002-2006.

	Year											
	2001‡		*2002*		*2003*		*2004*		*2005*		*2006*	
	Number	*Rate*	*Number*	*Rate*	*Number*	*Rate*	*Number*	*Rate*	*Number*	*Rate*	*Number*	*Rate*
Males	NA		1,463	52.7	1,480	52.9	1,616	57.3	1,704	60.4	1,539	54.5
Females	NA		2,271	83.6	2,435	89.7	2,668	97.6	2,768	101.2	2,604	95.9

‡Emergency department data are not available for 2001.

Table 12. Inpatient hospitalization and emergency department visit costs due to self-inflicted injuries, Wisconsin, 2001-2006.

	Year					
	2001‡	*2002*	*2003*	*2004*	*2005*	*2006*
Hospitalization Charges*	$35.9	$39.4	$43.7	$45.5	$55.0	$57.8
Average Cost per Stay	$7,169	$7,898	$8,818	$9,065	$10,445	$10,945
ED Visit Charges*	NA	$4.4	$5.2	$6.0	$6.7	$6.3
Average Cost per Visit	NA	$1,176	$1,335	$1,391	$1,509	$1,520

**Charges listed are in millions of dollars.*
‡Emergency department data are not available for 2001.

Table 13. Selected questions and results from the 2007 Wisconsin Youth Risk Behavior Survey.*

	Percentage
Students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months.	22.4%
Students who made a plan about how they would attempt suicide during the past 12 months.	10.3%
Students who seriously considered attempting suicide during the past 12 months.	15.0%

**Administered by the Wisconsin Department of Public Instruction.*

DEMOGRAPHICS

Suicide by Age
All age groups are impacted by suicide. During the time period reviewed, the highest rates of suicide in Wisconsin existed in the 35-44 and 45-54 age groups (Table 14). Nationally, the highest rates of suicide occurred in the 45-54 and 75-84 year age groups for the most recent year of data[1].

Suicide by Sex
Males had higher rates of suicide than females at a ratio of 4:1 (Table 15), which is consistent with national trends. As mentioned previously, the rate of suicide attempts by sex demonstrates the opposite trend (Tables 10 and 11). This most likely reflects the method used. Males tend to use methods with higher case fatality rates, such as firearms.

The highest number of suicides for males and females were in the 35-44 and 45-54 age groups across all years.

Marital Status
Approximately one-third of all suicide decedents were married at the time of their death, while 35-41% were never married (Table 16). One fifth (21-23%) of decedents were divorced at the time of death. Nationally, trends indicate that more persons were married at the time of death (39.3%) and less were never married (29.5%). Information on sexual orientation is not collected in the data sources used for this report.

Veteran Status
Veterans accounted for one out of every five suicides in Wisconsin over the time period indicated (Table 17). Veteran status was determined from the death certificate, which asks if the decedent was ever in the U.S. Armed Forces (any branch, including the National Guard or Reserves). Therefore, this definition includes veterans and those who are active at the time of death.

The proportion of suicide victims who were veterans increased greatly as the age of the victim increased (Figure 2). From age 55, veterans made up nearly half of suicide victims. Based on figures from the 2006 U.S. Census American Community Survey, approximately one out of ten Wisconsin civilians over age 18 is a veteran. This figure likely underestimates the number of Wisconsinites who would be considered veterans based on the aforementioned vital records definition since it considers veterans to be both former and current service members.

Education
The educational status of those persons who died by suicide across 2001-2006 was stable (Table 18). Of all decedents from 2001-2006, approximately 25% had less than a high school diploma, nearly 50% were high school graduates, approximately 25% had post-secondary education or degree, and approximately 5% had post-graduate education or a degree. Even when considering only those victims age 25 and older, these percentages remained consistent.

Suicide by Race and Ethnicity
The majority of suicide victims in the state of Wisconsin were White. When examining rates for the six years of the report, American Indian/Alaskan Native had the highest rates of suicide, followed by White, Black, and Asian/Pacific Islander and those of Hispanic ethnicity (Table 19). Racial and ethnic trends in Wisconsin are mirrored nationally.

[1] *Centers for Disease Control and Prevention. Surveillance for Violent Deaths–National Violent Death Reporting System, 16 States, 2005. Surveillance Summaries, April 11, 2008. MMWR 2008; 57 (No. SS-3).*

Table 14. Suicides, by age, Wisconsin, 2001-2006.

	Year						Age-specific rates
Age group	*2001**	*2002*	*2003*	*2004*	*2005*	*2006*	*All Years*
5-14	9	6	7	8	9	6	0.7
15-24	99	106	98	97	98	65	11.6
25-34	85	95	96	115	114	104	14.5
35-44	168	132	145	137	151	171	17.8
45-54	116	130	155	138	124	160	16.8
55-64	65	68	69	70	68	73	12.7
65-74	44	33	43	48	44	46	12.2
75-84	45	40	29	22	37	27	13.0
85+	16	20	12	12	12	8	12.3
Total	647	630	654	647	657	660	--
Age adjusted rate	11.77	11.30	11.68	11.47	11.59	11.62	--

**One person had a missing age in 2001.*

Table 15. Suicides, by age and sex, Wisconsin, 2001-2006.

	Year											
	*2001**		*2002*		*2003*		*2004*		*2005*		*2006*	
Age group	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*
5-14	6	3	5	1	7	0	5	3	6	3	3	3
15-24	84	15	94	12	82	16	83	14	79	19	55	10
25-34	74	11	77	18	82	14	90	25	88	26	78	26
35-44	132	36	106	26	117	28	93	44	121	30	144	27
45-54	92	24	104	26	123	32	99	39	105	19	119	41
55-64	53	12	51	17	57	12	56	14	55	13	56	17
65-74	35	9	28	5	36	7	41	7	37	7	37	9
75-84	39	6	35	5	28	1	19	3	30	7	24	3
85+	16	1	16	4	11	1	10	2	10	2	7	1
Total	531	117	516	114	543	111	496	151	526	125	524	137

**One person had a missing age in 2001.*

DEMOGRAPHICS

Table 16. Suicides, by marital status, Wisconsin, 2001-2006.

	Year					
Marital Status	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*
Married	225	218	241	194	207	225
Never Married	247	226	226	267	269	245
Widowed	39	47	35	38	43	35
Divorced	135	138	150	147	138	155
Unknown	2	1	2	1	0	0
Total	648	630	654	647	657	660

Table 17. Suicides, by veteran status, Wisconsin, 2001-2006.

	Year					
Veteran Status	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*
No	501	496	496	531	518	516
Yes	143	133	146	115	136	138
Unknown	4	1	12	1	3	6
Total	648	630	654	647	657	660
% of total who were veterans	22%	21%	22%	18%	21%	21%

Figure 2. Portion of suicides in which victim was a veteran, by age, Wisconsin, 2001-2006 (aggregate).

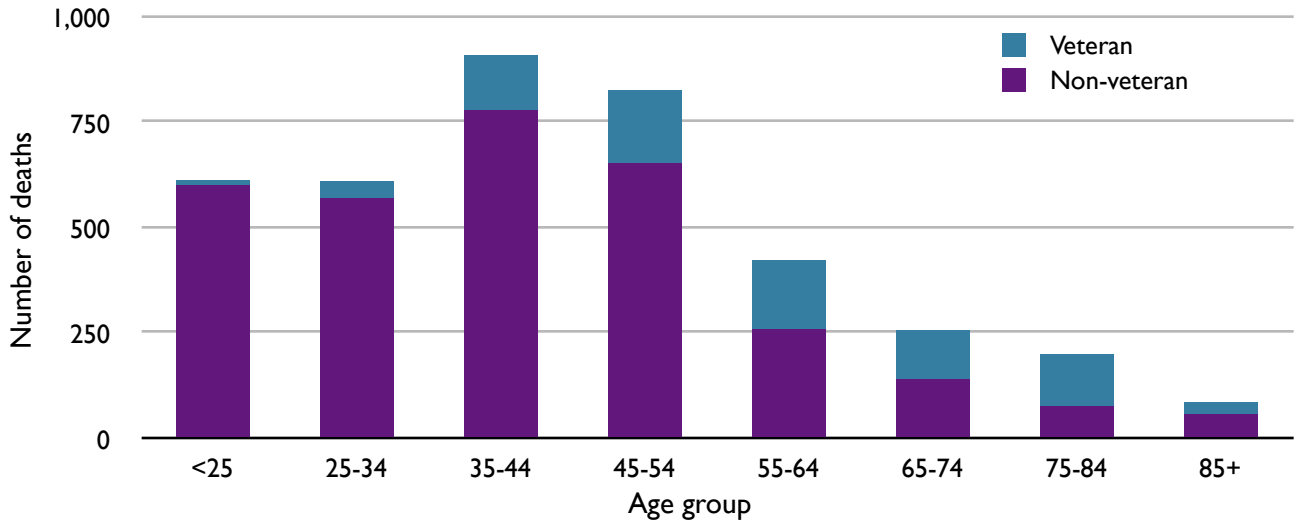


Table 18. Suicides, by education level, Wisconsin, 2001-2006.

	Year					
Education	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*
Less than high school	153	123	141	135	135	121
High school graduate	299	296	303	293	299	317
Post-secondary education or degree	162	177	170	173	182	185
Post-graduate education or degree	30	33	39	40	40	35
Unknown	4	1	1	6	1	2
Total	648	630	654	647	657	660

Table 19. Suicides, by race and ethnicity, Wisconsin, 2001-2006.

	Year						Rate
Race	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*All Years*
White	613	597	610	605	610	605	12.1
Black	22	22	23	28	19	32	7.1
Asian/Pacific Islander	4	8	10	4	5	10	6.1
American Indian/ Alaskan Native	7	3	11	7	18	8	16.6
Other	0	0	0	0	0	1	--
Unknown	2	0	0	3	5	4	--
Total	648	630	654	647	657	660	11.8
Ethnicity	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*All Years*
Hispanic	11	10	17	15	14	11	5.6
Non-hispanic	635	619	636	632	643	649	12.0
Unknown	2	1	1	0	0	0	--
Total	648	630	654	647	657	660	11.8

CIRCUMSTANCES

Method Used

Table 20 describes the most frequently used methods for suicide in Wisconsin. The most common method was firearms (46-50% across all years). Hanging, strangulation, and/or suffocation methods are the second most common (23-26%), followed by poisoning (19-23%). Firearms have the highest case fatality rates of all methods (90%) followed by hanging (83%). Poisoning has the lowest case fatality rate (2%). National trends are similar, although use of a firearm was slightly higher (51.5%).

Location

Seventy-five percent of suicides occurred in a house or apartment, followed by natural area (e.g. field, river, beach, woods) or park, motor vehicles, street, sidewalk or alley, and hotel/motel. Across all six years, 64 deaths (2%) occurred in a jail or detention facility (Table 21). National trends mirror these. Further information on location is provided on page 27 in the Technical Notes.

Circumstances Known

Circumstance information was collected from 97% of suicide victims from 2001-2006. Explanations of these circumstances are provided on page 27 in the Technical Notes. All circumstances are listed in Table 22. Similar trends exist nationally for all of the following:

Mental Illness/Substance Abuse

Mental illnesses were commonly noted for suicide victims across all years. Of those with known circumstances, 66% had a current depressed mood, 51% had a current mental health problem, 37% were in current treatment for mental illness, and 46% were noted as ever having treatment for mental illness.

One third of decedents are noted as having an alcohol problem, with one fifth of decedents having an other substance abuse problem.

Interpersonal Circumstances

One out of every three suicide decedents had a known intimate partner problem. Other interpersonal experiences were other relationship problem, other death of a friend/ family member, and recent suicide of a friend/ family member.

Life Stressor Circumstances

The most common circumstance in this category was having a crisis in the past two weeks, followed by physical health problem, financial problem, job problem and school problem.

Suicide Event

Approximately one-third of decedents left a suicide note and/or disclosed suicide intent. One out of every four suicides had a history of suicide attempts.

Toxicology Testing

Toxicology test results were available for approximately 65% of the cases. These results indicated:

- Over one-third of those tested had alcohol present in their system;
- One-fifth had antidepressants present;
- One percent had amphetamines present;
- Six percent had cocaine present;
- Eight percent had marijuana present;
- Thirteen percent had opiates present
- Over one-third had other drugs present.

More information about toxicology testing is provided on page 28 in the Technical Notes.

CIRCUMSTANCES

Table 20. Suicides, by method used, Wisconsin, 2001-2006.

	Year											
	2001		2002		2003		2004		2005		2006	
Method	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Firearm	325	50%	314	50%	313	48%	298	46%	309	47%	296	45%
Sharp instrument	13	2%	9	1%	16	2%	11	2%	14	2%	14	2%
Poisoning	128	20%	119	19%	138	21%	145	22%	151	23%	139	21%
Hanging, strangulation, suffocation	163	25%	151	24%	160	24%	156	24%	154	23%	163	25%
Fall	11	2%	13	2%	8	1%	16	2%	10	2%	8	1%
Drowning	3	<1%	12	2%	8	1%	8	1%	6	1%	9	1%
Fire or burns	0	--	5	1%	3	0%	5	1%	2	<1%	8	1%
Motor vehicle	0	--	2	<1%	4	1%	6	1%	2	<1%	12	2%
Other transport vehicle	0	--	0	--	0	--	2	<1%	8	1%	8	1%
Other*	5	1%	5	1%	4	1%	0	--	1	<1%	3	<1%
Total	648		630		654		647		657		660	

*Only the most common methods are listed above. "Other" includes non-powder gun, explosive, and blunt instrument, and additional methods that do not fall within the categories outlined by VIRS and WVDRS.

Table 21. Suicides, by location of death, Wisconsin, 2001-2006.

	Year					
Location*	2001	2002	2003	2004	2005	2006
House, apartment	529	492	493	474	474	475
Natural area, park	38	41	55	48	52	38
Motor vehicle	14	19	40	64	49	52
Street, sidewalk, alley	13	12	12	6	10	11
Jail, detention facility	12	9	7	11	12	13
Hotel/motel	0	15	17	15	12	18
Other	42	42	30	28	47	53
Unknown	0	0	0	1	1	0
Total	648	630	654	647	657	660

*Only the most common locations are listed above. For more information on "Other" locations, please refer to page 27 in the Technical Notes.

CIRCUMSTANCES

Table 22. Circumstances* associated with suicides, Wisconsin, 2001-2006 (aggregate).

Mental Health/Substance Abuse	*Number*	*Percent*
Current depressed mood	2556	66%
Current mental health problem	1994	51%
Current mental health treatment	1424	37%
Ever had mental health treatment	1779	46%
Ever had alcohol problem	1118	29%
Other substance problem	648	17%
Interpersonal		
Intimate partner problem	1351	35%
Other relationship problem	524	13%
Recent suicide of friend/family	109	3%
Other death of friend/family	325	8%
Perpetrator of violence in past month‡	70	4%
Victim of violence in past month‡	8	<1%
Life Stressor		
Crisis during previous two weeks	1366	35%
Physical health problem	972	25%
Job problem	734	19%
Recent criminal legal problem‡	296	15%
Non-criminal legal problem‡	104	5%
School problem	96	3%
Suicide Event		
Left a suicide note‡	732	37%
Disclosed intent	1533	39%
Had history of suicide attempt(s)	955	25%

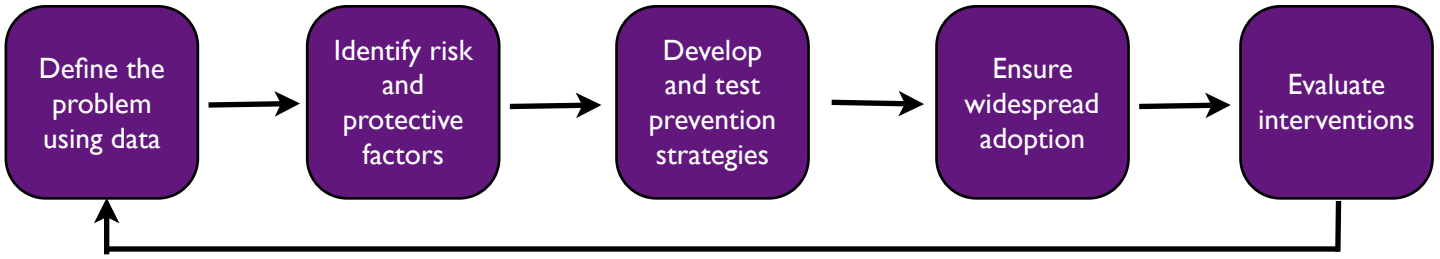
**More than one circumstance may be selected for each death; therefore, total circumstances will not add up to victim count for which circumstances were known.*
‡This information was only collected from 2004-2006.

Table 23. Toxicology testing and results associated with suicides, Wisconsin, 2001-2006 (aggregate).

Alcohol	*Number*	*Percent*
Tested, with results	2549	65%
Alcohol present in those tested	938	38%
Not tested or unknown	1347	35%
Antidepressant		
Tested, with results	2477	64%
Antidepressant present in those tested	568	23%
Not tested or unknown	1419	36%
Amphetamines		
Tested	2470	63%
Amphetamine present in those tested	37	2%
Not tested or unknown	1426	37%
Cocaine		
Tested, with results	2464	63%
Cocaine present in those tested	160	6%
Not tested or unknown	1432	37%
Marijuana		
Tested	2460	63%
Marijuana present in those tested	201	8%
Not tested or unknown	1436	37%
Opiates		
Tested	2472	63%
Opiates present in those tested	311	13%
Not tested or unknown	1424	37%
Other drugs		
Tested	2501	64%
Other drugs present in those tested	1004	40%
Not tested or unknown	1395	36%

PREVENTION STRATEGIES

Figure 3. Public health approach to suicide prevention.



The public health approach (Figure 3) is an ideal method to address suicide prevention. The first two steps of the public health approach, define the burden of suicide in Wisconsin and identify risk factors, have been accomplished throughout this report. The next steps include developing, implementing and evaluating prevention strategies that are informed by your data. Mental Health America of Wisconsin (MHA) has created a toolkit to assist local communities in understanding the various components of suicide prevention efforts and how to move from having informed data from this report to developing action plans using strategic planning, goal setting, and assessing community readiness and needs. The following is a brief description and outline of the MHA toolkit, which can be accessed at www.mhawisconsin.org/content/introductiontoolkit.asp.

Making the case

Understanding the impact of suicide and suicide attempts on your community is essential to obtaining funding and support for your activities. *The Burden of Suicide in Wisconsin* was developed as a resource to assist in making your case to funders and community leaders.

Develop a broad-based coalition

The reality of suicide is that it impacts everyone and everyone has a unique role to play in its prevention. This could include health and mental health providers, EMT, police, clergy, parents, media and other community members. This section provides you with a list of essential partners, along with information on how to build, maintain and sustain your coalition.

Develop and implement a crisis and postvention plan or policy

This section addresses how to develop and implement a crisis plan along with sample plans that incorporate best practices. This section also has recommendations from the Statewide Crisis Intervention Network that address crisis planning from a community-wide perspective. Postvention issues (what to do after a suicide occurs) are addressed with information from the Center for Disease Control (CDC) and recommendation on cultural competency from the National Association of School Psychologists. MHA also has postvention protocols for schools and communities on its website.

Implementing prevention strategies

The toolkit provides additional resources on many of the prevention strategies listed in this report (see below).

Complementary programs

Classroom curriculum that focuses on increasing youth assets has been shown to be a protective factor in suicide prevention. Specifically, problem solving, coping skills and conflict resolution skills are important elements of resiliency that can reduce the likelihood of suicide. This section includes classroom curriculum designed to enhance these skills. Another essential component to mental health and suicide prevention is safety. Youth need environments that are both physically and psychologically safe in order to flourish. Therefore, programs that address bullying and violence naturally complement suicide prevention programs by contributing to an environmental context within which these programs can succeed.

Maintain survey and evaluation procedures

This section provides information on evaluating your efforts.

Funding your suicide prevention initiative

Funding for your initiative will be based upon how successful you are in establishing a coalition of

PREVENTION STRATEGIES

stakeholders, implementing comprehensive programming, and documenting your results with effective evaluation tools. This section outlines some potential funding sources on the national and state levels, along with suggestions for creative local funding options.

Wisconsin Suicide Prevention Strategy
This document, developed in response to the former U.S. Surgeon General David Satcher's *Call to Action to Prevent Suicide*, provides guidelines for individuals, communities, and organizations to implement prevention efforts. It is available electronically via www.dhs.wisconsin.gov/health/injuryprevention/pdffiles/WISuicidePrevStrategy.pdf. This document, along with the MHA toolkit, support the following evidence based strategies listed on the Best Practices Registry of the Suicide Prevention Resource Center.

Increasing access to mental health treatment
The majority of people who completed suicide from 2001-2006 had current depressed moods. Significant numbers of persons also had a current mental health problem, were currently in treatment for a mental illness, and/or were ever treated for a mental illness. Increasing access to mental health services is an important component of preventing suicide across all demographic categories.

- Screening tools for depression, suicidal ideation and suicidal acts are available. Examples of youth-oriented screenings include Columbia TeenScreen and Signs of Suicide (SOS). The Geriatric Suicide Ideation Scale (GSIS) is a validated screening tool for the elder population. Additional information regarding screening:
  - Columbia TeenScreen www.teenscreen.org
  - SOS www.signsofsuicide.org
- Improving health care provider recognition of depression and suicide risk and encouraging the use of screening tools at primary care visits may impact the burden of suicide. Additionally, is important to provide appropriate follow-up care after suicide attempts.
- Community wide "gatekeeper trainings" train persons (gatekeepers) who have regular contact with potentially vulnerable populations to more readily identify populations at-risk for suicide and refer them to appropriate services. An example of a gatekeeper training program is Question-Persuade-Refer (QPR). For more information visit: www.qprinstitute.com.

Media guidelines
Members of the media should be encouraged to follow guidelines for reporting suicide so as not to encourage at-risk persons to attempt suicide. Recommended guidelines, examples of good reporting and other information pertaining to media training can be found in *Reporting on Suicide: Recommendations for the Media*, a consensus document found at www.afsp.org, or in the MHA toolkit.

Means restriction
Means restriction activities are designed to reduce access or availability to the means and methods of deliberate self-harm in an attempt to reduce the odds that an attempter will use a highly lethal means. Most means restrictions activities are designed to reduce access to firearms and/or medications through a variety of activities outlined in Table 24. Implementing these types of activities is the 5th goal of the Wisconsin Suicide Prevention Strategy, and another component of prevention. Additional information about means restriction can be found at: Harvard School of Public Health Means Matter Campaign (www.meansmatter.org).

Cultural Tailoring and Prevention Strategies

Racial/Ethnic Groups
Given that racial/ethnic group have differing rates of suicide, it is important to consider culture when developing and evaluating suicide prevention strategies. For more information on culturally-specific suicide prevention interventions, or how to incorporate cultural competence into your prevention planning, please visit the SPRC Online Library at http://library.sprc.org/ and click on "Cultural Competence" on the left hand toolbar. Additionally, you can read about specific interventions featured at the National Institutes of Mental Health Roundtable "Pragmatic Considerations of Culture in Preventing Suicide" available at www.nimh.nih.gov/research-funding/scientific-meetings/2004/pragmatic-considerations-of-culture-in-preventing-suicide.shtml

PREVENTION STRATEGIES

Deaf and Hard of Hearing Populations

While data are not separately collected for persons who are deaf or hard of hearing (D/HOH) or have other conditions or disabilities, we know from the literature that persons who are D/HOH have reduced access to mental health and other community services because of communication issues. The Wisconsin School for the Deaf has developed training on working with this population called *Culturally Affirmative Services for Deaf and Hard of Hearing Individuals* in an attempt to make sure that D/HOH persons in crisis have access to services through the use of sign language interpreters and other accommodations. Agencies or organizations interested in hosting this valuable training can contact Christina Dean at the Wisconsin School for the Deaf (262)728-7118 christina.dean@dpi.wi.gov.

ADDITIONAL RESOURCES

Suicide Prevention Resource Center
www.sprc.org
American Association of Suicidology
www.suicidology.org
Centers for Disease Control
www.cdc.gov/ncipc/dvp/Suicide/default.htm
Wisconsin Suicide Prevention Initiative
www.dhs.wisconsin.gov/health/InjuryPrevention/SuicidePrevention.htm
Wisconsin Department of Public Instruction Youth Suicide Prevention
www.dpi.wi.gov/sspw/suicideprev.html
HOPES
www.hopes-wi.org
Mental Health America of Wisconsin
www.mhawisconsin.org/content/suicide_prevention.asp

Table 24. Means restriction activities for suicide prevention coalitions.

	Lethal Means	
Local-level action steps	*Firearms*	*Medications*
Collaborate with primary care physicians and mental health clinicians in your area to routinely ask about presence of lethal means with all patients, especially those with depression/anxiety or have recently experienced change in school/job/relationships (AAP endorsed).	✓	✓
Collaborate with law enforcement to develop standard practices in response to domestic emergencies that assess for the presence of lethal means and advocate their safe removal and storage.	✓	✓
Encourage safe storage outside home, if possible.	✓	✓
Store guns securely in home--storing ammunition separately, securely locked cabinets and gun lock boxes.	✓	
Advocate with newspapers not to carry classified ads by individuals for guns.	✓	
Parents ask other parents about the presence of lethal means; family members inquire about presence of lethal means.	✓	✓
Addition of a lethal means restriction policy to local suicide prevention protocols.	✓	✓

TECHNICAL NOTES

CASE DEFINITIONS

Death information for this report was obtained from the Violent Injury Reporting System (VIRS) (2001-2003) and the Wisconsin Violent Death Reporting System (WVDRS) (2004-2006). VIRS data are maintained by the Injury Research Center at the Medical College of Wisconsin. WVDRS data are maintained at the Wisconsin Department of Health Services.

These systems provide comprehensive data on all violent deaths in Wisconsin, including suicide deaths. Cases are initiated through a death certificate. Information on each case is then collected from coroner/medical examiner records, police records, and crime lab records. WVDRS is funded by the Centers for Disease Control and Prevention (CDC) and is part of the National Violent Death Reporting System (NVDRS). More information about NVDRS may be obtained at www.cdc.gov/ncipc/profiles/nvdrs/default.htm.

Inpatient hospitalization and emergency department visit data were obtained from the Bureau of Health Information and Policy, Division of Public Health, Wisconsin Department of Health Services with data collected by the Wisconsin Hospital Association Information Center. Inpatient hospitalizations and emergency department visits due to self-inflicted injury were identified according to External Cause of Injury groupings (E codes) within the International Classification of Diseases, Ninth Revision (ICD-9). The specific codes used were E950-E959. WISH was also used to obtain cost information for inpatient hospitalizations and emergency department visits.

Simple queries may be performed on WVDRS, inpatient hospitalization, and emergency department visit data via the Wisconsin Interactive Statistics on Health (WISH) web-based query system. Please visit www.dhs.wisconsin.gov/wish.

Suicidal Behavior

Rate refers to the number per unit of the population with a particular characteristic, for a given unit of time. Rates were calculated per 100,000 persons for this report. Rates based on numbers of 20 or less are considered unstable due to random chance and should be interpreted with caution.

Suicide is death from injury, poisoning, or suffocation where there is evidence that a self-inflicted act led to the person's death.

Suicide attempt is a potentially self-injurious behavior with a nonfatal outcome, for which there is evidence that the person intended to kill himself or herself; a suicide attempt may or may not result in injuries. Suicide attempts are defined as hospitalizations for self inflicted injuries or emergency department visits for self-inflicted injuries in this report.

Suicidal behavior refers to a spectrum of activities related to thoughts and behaviors that include suicidal thinking, suicide attempts, and completed suicide.

Years of potential life lost (YPLL) is a measure to describe the amount of years "lost" due to premature death (defined as age 75 in this report). Calculations found on page 13 of the report were obtained from the WISH Mortality module at www.dhs.wisconsin.gov/wish/main/mortality/mortality_home.htm. This calculation is performed using death certificate data only.

Youth Risk Behavior Survey (YRBS) is used to monitor risk behaviors, including suicide ideation and attempts, of high school students in the State. This sample-based survey is administered by the Wisconsin Department of Public Instruction. More information may be found at: www.dpi.wi.gov/sspw/yrbsindx.html.

County is defined as the county of residence of victim or patient.

Demographics

Veteran status is determined from the death certificate, which asks if the decedent was ever in the U.S. Armed Forces (any branch, including the National Guard or Reserves).

Education status was defined as less than high school if the victim had completed less than 12 years of school; "high school graduate" if the victim completed 12 years of school; "post-secondary education or degree" if the victim completed more than 12 and greater than or equal to 16 years of school; and "post-graduate education or degree" if the victim completed more than 16 years of school.

TECHNICAL NOTES

Marital status was defined using data from death certificates. Categories include married, never married, widowed, divorced and unknown. Information regarding separations is not collected on death certificates, and thus would be classified as married. Same-sex relationship information is also not collected on death certificates.

Race/Ethnicity information is obtained from death certificates, coroner/medical examiner reports, or police reports. Race categories include White, Black, American Indian/Alaskan Native, Asian, Pacific Islander, and unknown. Ethnicity categories include Hispanic and Non-Hispanic.

Age denotes the victim's age at the time of death.

Circumstances

Method refers to the method used to self-inflict the injury. "Firearm" refers to shotguns, rifles, and handguns as well as unspecified firearms. "Sharp instrument" refers to knives, razors, or other pointed instruments. "Poisoning" refers to intentional overdose of drugs, medical substances, biologicals, solid and liquid substances and gases and vapors. "Hanging, strangulation, suffocation" refers to the inhalation of objects that block respiration or other mechanical means that hinder breathing. "Fall" refers to jumping. "Drowning" refers to deaths from drowning and submersion with and without the involvement of watercraft. "Fire or burns" refers to deaths as a result of fire, flames, and hot objects or substances. "Motor vehicle" refers to intentional deaths resulting from motor-vehicle-traffic crashes involving automobiles, vans, trucks, motorcycles and other motorized cycles known or assumed to be traveling on public roads or highways. "Other" refers to non-powder gun, explosives, blunt instrument, and additional methods that do not fall within the categories outlined by VIRS and WVDRS.

Location of death is described on page 21 of the report. In addition to the locations listed, *Other* includes: highway/freeway, bar/nightclub, service station, bank/credit union/ATM, liquor store, other commercial establishment, industrial or construction areas, office building, parking lot/public parking garage, abandoned house/building/warehouse, sports/athletic arena, school bus, child care center/daycare/preschool, elementary/middle school, high school, college/university, unspecified school, public transportation or station, synagogue/church/temple, hospital/medical facility, supervised residential facility, park/playground/public use area, railroad tracks, and other locations that do not fall within one of the mentioned categories.

Current depressed mood identifies suicide victims who were documented as having a current depressed mood. The depressed mood may be part of a clinical depression or a short-term sadness.

Current mental health problem identifies suicide victims who were identified as having a mental health problem including those disorders and syndromes listed in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Revision.

Current mental health treatment refers to victims who were identified as seeing a mental health professional within the past two months or had a current prescription for a psychiatric medication.

Ever had mental health treatment refers to victims who were noted as ever having received professional treatment for a mental health problem, either at the time of death or in the past.

Ever had alcohol problem refers to victims who were perceived by self or others to have a problem with, or to be addicted to, alcohol or were noted as participating in an alcohol rehabilitation program. This does not refer to problems in the past (i.e. five years ago or more) that have been resolved and no longer appear to apply.

Other substance problem refers to victims who were perceived by self or others to have a problem with, or to be addicted to, illegal drugs, prescription medications, or inhalants.

Intimate partner problem refers to suicides that are related to friction or conflict between intimate partners.

Other relationship problem refers to problems with a family member or friend (other than an intimate partner) that appear to have contributed to the victim's decision to commit suicide.

TECHNICAL NOTES

Recent suicide of friend/family identifies suicides that may have been impacted by a suicide of a family member or friend within the past five years.

Other death of friend/family identifies suicides that may have been impacted by a death (non-suicide) of a family member or friend within the past five years.

Perpetrator of violence in past month identifies victims who were perpetrators of interpersonal violence within the past month.

Victim of violence in past month identifies those who were victims of interpersonal violence within the past month.

Crisis during previous two weeks refers to victims who experienced a crisis within two weeks of the suicide, or a crisis was imminent within two weeks of the suicide. Examples of crises include a very recent or impending arrest, job loss, argument or fight, relationship break-up, police pursuit, financial loss, loss in social standing, eviction, or other loss.

Physical health problem refers to suicides in which a physical health problem appears to have contributed to the suicide. Examples of physical health problems include terminal disease, debilitating condition and chronic pain.

Job problem refers to suicides in which job problems appear to have contributed to the suicide. Examples of job problems include tensions with a co-worker, poor performance reviews, increased pressure and feared layoff. This variable also includes joblessness (e.g. recently laid off, having difficulty finding a job).

Recent criminal legal problem refers to suicides that appear to be related to criminal problems such as recent or impending arrest, police pursuit, or impending criminal court dates in which evidence of negative legal or law enforcement consequences exists.

Non-criminal legal problem refers to suicides that appear to be related to legal (non-criminal) problems such as a custody dispute or civil lawsuit.

School problem refers to suicides in which problems at school appear to have contributed to the suicide. Problems at school include poor grades, bullying, social exclusion at school or performance pressures.

Left a suicide note refers to suicides in which the victim left a note, email, video or other written communications that they intended to commit suicide.

Disclosed intent refers to suicides in which the victim had previously expressed suicidal feelings to another person whether explicitly or indirectly.

Had history of suicide attempt(s) refers to suicides in which the victim was known to have made previous suicide attempts, regardless of the severity of those attempts.

Toxicology

In Wisconsin, all suicides are considered required reportable deaths to the coroner or medical examiner of that county (SS 929.01). Coroners and medical examiners consider the facts of each case individually, and determine what level of investigation/examination is necessary to determine the cause and manner of death and to clarify the circumstances surrounding the death. Toxicology screens may or may not be done in each investigation.

Tested refers to the number of victims that received toxicological screening.

Present in those tested refers to the number of victims who had the specific drug (alcohol, antidepressant, amphetamine, cocaine, marijuana, opiates, other drugs) present in their toxicological screen.

Not tested or unknown refers to the number of victims that did not receive toxicological testing or it was unknown if the victim received toxicological testing.