Suicide in Indiana Report 2006–2011

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SUICIDE IN INDIANA

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Highlights in Indiana

Mortality, 2006–2010 [1]

- From 2006–2010, 4,115 Hoosiers died by suicide, making it the 11th leading cause of death in Indiana. In 2010, 867 Hoosiers died by suicide at a rate of 13.1 per 100,000.
- Males accounted for 77.6 percent (673) of all suicides, of which, 93.5 percent were white.
- Males were greater than four times more likely to complete suicide compared to females.
- White males ages 45–54 years had the highest rate of suicide, followed by white males 65 years of age or older, and white males ages 35–44 years.
- Suicide was the second leading cause of death among 15–34 year olds, the third leading cause of death among 10–14 year olds, and the fifth leading cause of death among 35–54 year olds.
- The method in which Hoosiers died by suicide included 53.6 percent by firearms, 23.0 percent by suffocation, 18.4 percent by poisoning, and 4.9 percent by other methods.
- The most common method of male suicide was via firearms, while the most common method among females was poisoning.

Inpatient data—Self-inflicted injuries (suicide attempt), 2007–2011 [2]

- 12,892 hospitalizations were due to self-inflicted injuries, accounting for nearly eight percent of injury-related hospitalizations. The average age of these patients was 37 years.
- Females accounted for the majority (58 percent; 7,525) of suicide attempts resulting in hospitalizations.
- For suicide attempts resulting in hospitalization, 92.1 percent involved poisoning by solid or liquid substances. The top three medications used in poisonings included tranquilizers, pain relievers, and antidepressants.

Emergency Department (ED) data—Self-inflicted injuries (suicide attempt), 2007–2011 [3]

- 21,296 ED visits were due to self-inflicted injuries, accounting for nearly eight percent of all injury-related ED visits. The average age of these patients was 30 years.
- Females accounted for the majority (58 percent; 12,427) of suicide attempts seen in the ED.
- For suicide attempts seen in the ED, 68.5 percent involved poisonings, of which tranquilizers and pain relievers were used most often. Additionally, 22.2 percent of attempts involved cutting or piercing methods.

Suicide attempts among youth, 2011 [4]

- 29.1 percent of high school students reported feeling sad or hopeless almost every day for two weeks or more in a row resulting in changes in behavior during the past 12 months.
- Eleven percent of Indiana high school students reported that they attempted suicide in the previous 12 months.
- Nineteen percent of Hoosiers in grades 9–12 seriously considered attempting suicide during the past 12 months.

Introduction

Suicide occurs across all economic, racial/ethnic, age, and social boundaries. Suicide accounted for 38,365 lives lost in the United States (U.S.) in 2010, which equates to 105.1 suicides per day.[5] In 2008, 666,000 Americans were seen in hospital emergency departments (ED) for nonfatal, self-inflicted injuries, commonly termed suicide attempts.[6] Still, many suicides or suicide attempts go unreported, causing the magnitude of the problem to be far greater than what current statistics demonstrate.

Suicide is a major preventable public health problem throughout the U.S.[6] According to the American Foundation for Suicide Prevention, some suicides occur without any warning, but most people who are suicidal give warning signs. Such warning signs include talking about a specific suicide plan, losing interest in things and activities, and acting irritable or agitated.[7] While each suicide or attempted suicide can be as unique as the person who experiences it, there are ways to address the multiple social, emotional, environmental, and health factors involved. Suicide prevention efforts must involve different strategies requiring a wide range of partners and draw on a diverse set of resources and tools.[6]

More than a decade has passed since Surgeon General David Satcher broke the silence surrounding suicide in the United States by issuing *The Surgeon General's Call to Action to Prevent Suicide*.[8] Published in 1999, this landmark document introduced a blueprint for suicide prevention and guided the development of the National Strategy for Suicide Prevention. Released in 2001, the National Strategy set forth an ambitious national agenda for suicide prevention consisting of 11 goals and 68 objectives.[9]

In September of 2012, the National Action Alliance for Suicide Prevention released a revised National Strategy reflecting substantial input from individuals and organizations nationwide with an interest in suicide prevention. The revised National Strategy is a call to action intended to guide suicide prevention strategies in the U.S. over the next decade.[9] Some of the major developments addressed in the revised version include:

- A better understanding of how suicide is related to mental illness, substance abuse, trauma, violence, and other related issues;
- New information about groups that may be at an increased risk for suicidal behaviors;
- Increased knowledge of the types of interventions that may be most effective for suicide prevention; and
- An increased recognition of the importance of implementing suicide prevention efforts in a comprehensive and coordinated way.[9]

The 2012 National Strategy emphasizes the role every American can play in protecting friends, family members, and colleagues from suicide. It also provides guidance for schools, businesses, health systems, clinicians, and many other sectors about suicide prevention and takes into account nearly a decade of research and other advancements in the field since the last strategy was published.

In an effort to describe the burden of suicide in Indiana, the Division of Trauma and Injury Prevention at the Indiana State Department of Health (ISDH) compiles and disseminates data based on the most recent mortality and morbidity data available at both the state and national level. This data helps identify populations at risk for suicide as well as expose trends in suicide incidence and prevalence. The objective of this report is to define the problem, both in the U.S. and in Indiana, and provide an overview of risk factors, protective factors, prevention issues, and local and national resources available.

Suicide in the United States

The most recent data ranks suicide as the tenth leading cause of death for Americans (Table 1).[5,10] An average of one person dies by suicide every 13.7 minutes. The incidence of suicide was 12.4 per 100,000 in 2010, with an age-adjusted value of 12.1 per 100,000. Between 1990 and 2010, suicide rates in the U.S. have ranged from 10.7 and 12.4 per 100,000 (Figure 1).[5,11]

Nationally, suicide is the second leading cause of death among those 25–34 years of age, and the third leading cause of death among youth and young adults (ages 10–14 and 15–24, respectively) (Table 1).[10] Figure 2 displays a more detailed breakdown of suicide deaths by age group. In 2010, persons under age 25 years accounted for 13 percent of all suicides.[11] Each year, there are about ten youth suicides for every 100,000 youth, with an average of one person under 25 years of age committing suicide every two hours.[11] Statistics indicate that youth and young adult suicide rates in the U.S. increased by more than 200 percent from the 1950's to the late 1970's, remained stable from the late 1970's to the mid-1990's, and since then, have slightly decreased.[5] Between 2000 and 2010, youth suicide rates have ranged from 9.7 to 10.5 per 100,000.[5] While suicide is a leading cause of death among youth, rates increase with age and are highest among Americans 85 years and older (17.6 per 100,000).[12] In 2010, suicide was the 18th leading cause of death for persons over the age of 65, resulting in 5,994 deaths.[10]

Whites in 2010 had higher suicide rates (14.1 per 100,000) than American Indian/Alaska Natives (11.0 per 100,000), Asian/Pacific Islanders (6.2 per 100,000), and Black/African Americans (5.1 per 100,000).[5] Whites accounted for 90.4 percent of all suicides in 2010.[12] When comparing sex differences in 2010, males (19.9 per 100,000) were nearly four times more likely to die from

suicide than females (5.2 per 100,000). Males accounted for 78.9 percent (30,277) of all suicide deaths, of which 90.5 percent (27,422) were white. Overall, females died by suicide less often than males, and white females, who represented 18.9 percent (7,268) of all suicides, died by suicide more often than black females (389).[12]

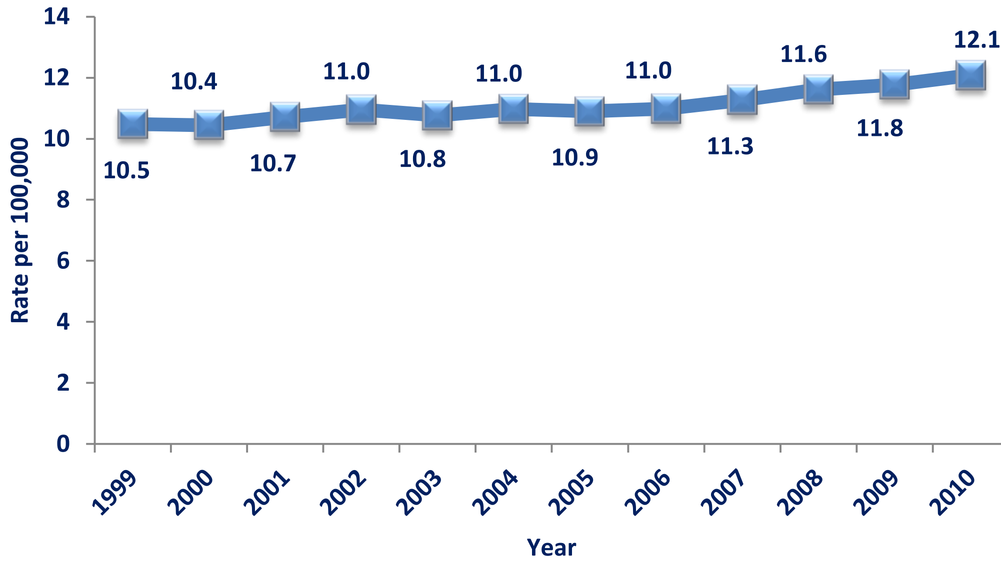
Firearms remain the most common method of suicide in the U.S., as intentional self-harm by discharge of firearms accounted for 19,392 deaths by suicide. Of the 38,264 individuals who took their lives during 2010, more than half (51 percent) used a firearm, 25 percent suffocated, 17 percent used poison and seven percent used another method (Figure 3).[12] The most common method of suicide for males was firearms, with males using firearms (11.2 per 100,000) more than seven times more often than their female counterparts (1.5 per 100,000). Suicide by poisoning accounted for 6,599 deaths in 2010 at a rate of 2.1 per 100,000, although since 2001, poisoning surpassed firearms as the most frequently used method for female suicides.[5,12]

Table 1: Ten leading causes of death by age group, all races, both sexes, U.S., 2006-2010

	Age Groups										
Rank	<1	1–4	5–9	10–14	15–24	25–34	35–44	45–54	55–64	65+	All Ages
1	Congenital Anomalies 27,668	Unintentional Injury 7,527	Unintentional Injury 4,375	Unintentional Injury 5,268	Unintentional Injury 71,014	Unintentional Injury 73,154	Unintentional Injury 80,424	Malignant Neoplasms 251,731	Malignant Neoplasms 525,046	Heart Disease 2,458,855	Heart Disease 3,061,633
2	Short Gestation 23,138	Congenital Anomalies 2,553	Malignant Neoplasms 2,312	Malignant Neoplasms 2,256	Homicide 26,083	Suicide 26,618	Malignant Neoplasms 64,232	Heart Disease 187,077	Heart Disease 333,053	Malignant Neoplasms 1,956,679	Malignant Neoplasms 2,830,603
3	SIDS 11,418	Homicide 1,946	Congenital Anomalies 906	Suicide 1,137	Suicide 21,598	Homicide 22,573	Heart Disease 57,189	Unintentional Injury 99,985	Chronic Low. Respiratory Disease 67,596	Chronic Low. Respiratory Disease 572,759	Chronic Low. Respiratory Disease 669,030
4	Maternal Pregnancy Comp. 8,386	Malignant Neoplasms 1,831	Homicide 625	Homicide 997	Malignant Neoplasms 8,200	Malignant Neoplasms 17,918	Suicide 33,264	Liver Disease 41,172	Unintentional Injury 63,377	Cerebro-vascular 566,707	Cerebro-vascular 665,537
5	Unintentional Injury 6,038	Heart Disease 833	Heart Disease 462	Congenital Anomalies 805	Heart Disease 5,288	Heart Disease 16,180	HIV 14,743	Suicide 40,888	Diabetes Mellitus 57,144	Alzheimer's Disease 387,814	Unintentional Injury 606,087
6	Placenta Cord Membranes 5,449	Influenza & Pneumonia 613	Chronic Low. Respiratory Disease 285	Heart Disease 663	Congenital Anomalies 2,198	HIV 4,870	Homicide 14,213	Cerebro-vascular 30,911	Cerebro-vascular 52,693	Diabetes Mellitus 252,897	Alzheimer's Disease 391,996
7	Bacterial Sepsis 3,562	Septicemia 392	Influenza & Pneumonia 271	Chronic Low. Respiratory Disease 323	Influenza & Pneumonia 1,152	Diabetes Mellitus 3,067	Liver Disease 12,587	Diabetes Mellitus 28,402	Liver Disease 42,665	Influenza & Pneumonia 229,984	Diabetes Mellitus 352,160
8	Respiratory Distress 3,353	Perinatal Period 296	Benign Neoplasms 215	Influenza & Pneumonia 288	Cerebro-vascular 977	Cerebro-vascular 2,625	Cerebro-vascular 10,209	Chronic Low. Respiratory Disease 21,585	Suicide 27,309	Nephritis 198,241	Influenza & Pneumonia 269,116
9	Circulatory System Disease 2,849	Benign Neoplasms 277	Cerebro-vascular 203	Cerebro-vascular 236	Complicated Pregnancy 898	Influenza & Pneumonia 2,229	Diabetes Mellitus 9,593	HIV 18,774	Nephritis 23,485	Unintentional Injury 194,751	Nephritis 239,440
10	Neonatal Hemorrhage 2,757	Chronic Low. Respiratory Disease 271	Septicemia 166	Benign Neoplasms 200	Diabetes Mellitus 869	Liver Disease 2,069	Influenza & Pneumonia 4,592	Viral Hepatitis 13,436	Septicemia 22,047	Septicemia 132,664	Suicide 179,206

Source: National Center for Injury Prevention and Control CDC, National Center for Health Statistics Vital Statistics System, WISQARS

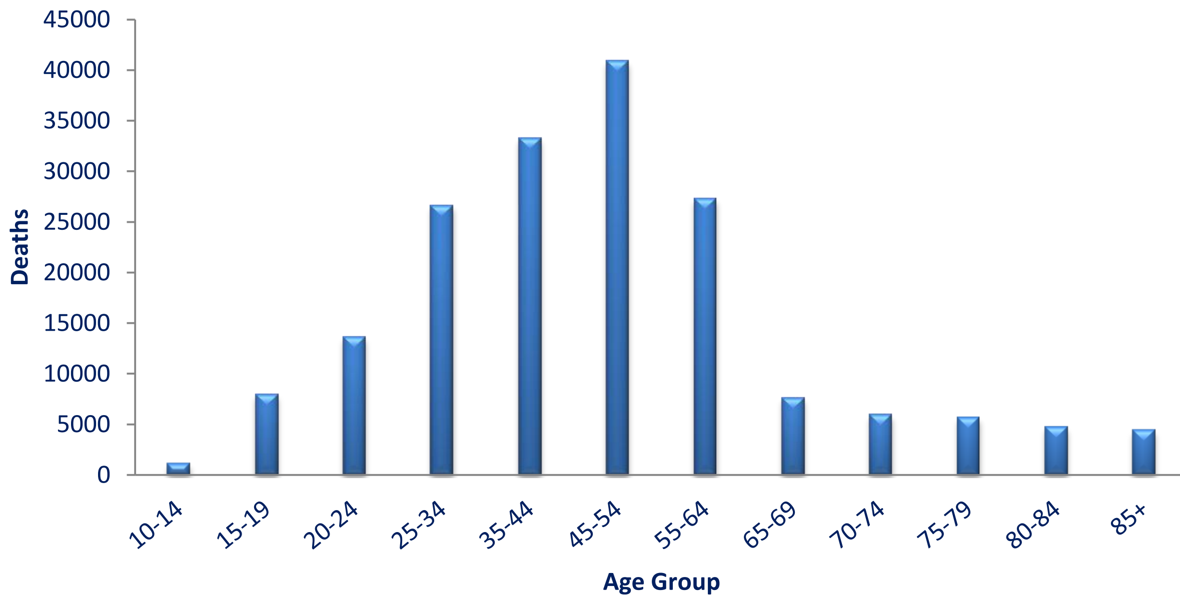
Figure 1. Suicide rates*, U.S., 1999–2010



*Age-adjusted rates per 100,000 population

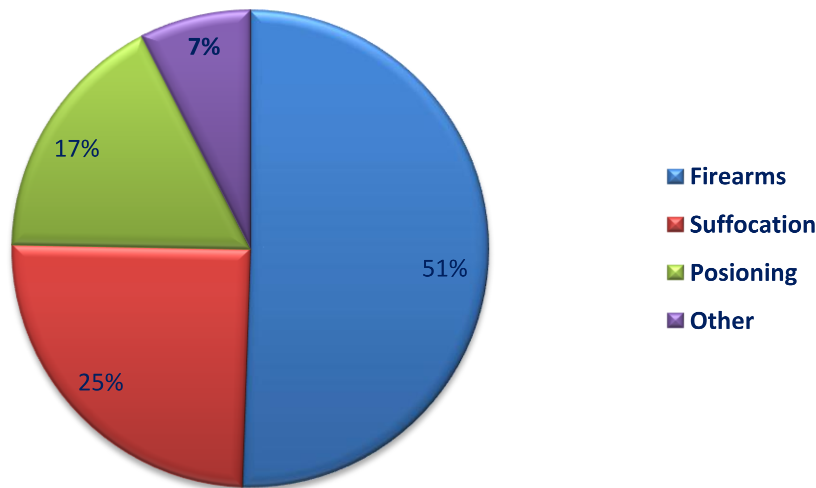
Source: National Center for Injury Prevention and Control CDC, National Center for Health Statistics Vital Statistics System, WISQARS

Figure 2. Suicide by age group, U.S., 2006-2010



Source: National Center for Injury Prevention and Control CDC, National Center for Health Statistics Vital Statistics System, WISQARS

Figure 3.Suicide by mechanism, U.S., 2010



Source: National Center for Injury Prevention and Control CDC, National Center for Health Statistics Vital Statistics System, WISQARS

Suicide in Indiana

From 2006 to 2010, 19,719 Hoosiers died from injuries, averaging eleven deaths each day. During 2010 alone, 2,511 deaths from unintentional injuries occurred.[1] While 65 percent of the injury deaths were unintentional (accidental), 21 percent of the deaths resulted from suicide, 9 percent from homicide, and 5 percent were of undetermined intent (Figure 4).[1]

From 2006 to 2010, 4,115 suicides were reported in Indiana, of which 867 suicides occurred in 2010. Suicide was the 11th leading cause of death among Hoosiers in 2010 (Table 2).[1] While the suicide rate remained fairly stable over the course of 2006-2010, it has increased slightly each year since 2007 (Figure 5). The overall suicide rate in Indiana was higher than the U.S. and Midwest rates.[5] When comparing age groups, Indiana suicide death rates were slightly higher than the U.S. rates in all age categories except for those over 65 years of age (Table 3).[5]

From 2006-2010, suicide was the second leading cause of death in the 15–34 age group, the third leading cause of death among those 10–14 years of age, and fourth among those 35–54 years of age. The majority of the deaths by suicide in 2010 occurred in those ages 45–54 years (219 suicides), followed by those ages 55-64 years (147 suicides) and ages 35-44 years (140 suicides) (Figure 6).[11]

National statistics indicate males die by suicide more frequently than females, and this is also true in Indiana.[1, 5] In 2010, the overall suicide death rate for Hoosiers was 13.1 per 100,000, 21.0 per 100,000 among males and 5.8 per 100,000 among females.[1] While the suicide rate among males decreased from 2009 to 2010, the female suicide rate increased from 4.5 per 100,000 in 2009 to 5.8 per 100,000 in 2010. Male suicide rates over these years have been consistently four to five times greater than female suicide rates (Figure 7).[1]

From 2006 to 2010, 95 percent of suicide deaths in Indiana occurred among white Hoosiers. Whites (13.5 per 100,000) surpassed blacks (5.1 per 100,000) and Asian/Pacific Islanders (5.2 per 100,000) in numbers of suicides during 2006 to 2010 (Figure 8). More suicide deaths were reported among white males compared to all other race/gender categories (Figure 9). When comparing age groups, white males ages 45–54 years had the highest numbers, at 719 deaths in each age category (Figure 10). When comparing rates, white male Hoosiers aged 45–54 years had the highest rate of suicide, followed by white males 65 years of age or older and white males aged 35–44 years. [1]

Of the 4,115 Indiana suicides reported from 2006 to 2010, 53.6 percent died by firearm, 23.0 percent by suffocation, 18.4 percent by poisoning, and 14.9 percent by other methods (Figure 11). White males died by suicide using firearms at a rate of 13.0 per 100,000 compared to black males at a rate of 5.7 per 100,000. White females were more likely to commit suicide by poisoning (2.2 per 100,000) than by firearms (1.8 per 100,000) or suffocation (1.0 per 100,000) and have higher rates in all categories compared to black females (Table 4).[1]

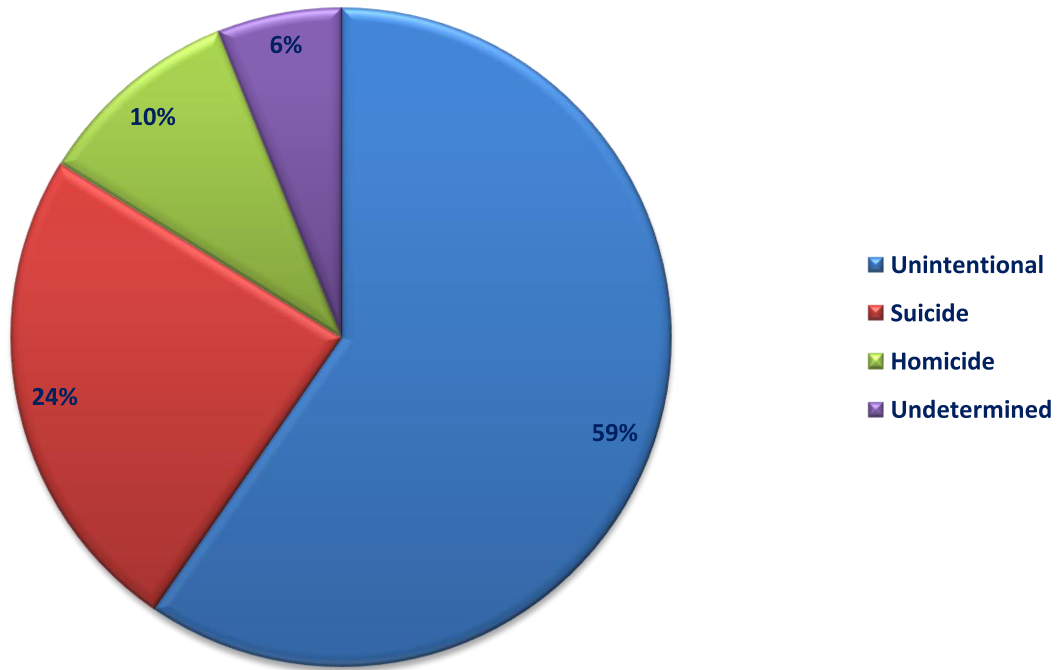
Suicide death data come from the ISDH mortality reports and differ slightly from the nationally based National Center for Health Statistics (NCHS). The ISDH does not always receive death certificates for Indiana residents who died out of state; therefore, the number of Indiana deaths reported by the ISDH is lower than the numbers from NCHS. As these deaths are likely to be reported to NCHS from out-of-state health departments, the NCHS will assign the state of residence, and thus the nationally based data is more complete than the state health department data. In addition, accuracy of mortality data is dependent upon how thoroughly the death certificate is completed, specifically with regards to intent. Another limitation is that race/ethnicity is reported at the discretion of the person completing the death certificate and may not reflect how an individual would define his or her own race.

Table 2: Eleven leading causes of death by age group, all races, both sexes, Indiana,2006-2010

	Age Groups										
Rank	<1	1–4	5–9	10–14	15–24	25–34	35–44	45–54	55–64	65+	All Ages
1	Congenital Anomalies 701	Unintentional Injury 177	Unintentional Injury 122	Unintentional Injury 145	Unintentional Injury 1,588	Unintentional Injury 1,607	Unintentional Injury 1,696	Malignant Neoplasms 5,899	Malignant Neoplasms 12,308	Heart Disease 54,124	Heart Disease 68,617
2	Short Gestation 598	Congenital Anomalies 61	Malignant Neoplasms 63	Malignant Neoplasms 42	Suicide 490	Suicide 655	Heart Disease 1,507	Heart Disease 4,552	Heart Disease 7,767	Malignant Neoplasms 44,706	Malignant Neoplasms 65,075
3	SIDS 239	Homicide 55	Congenital Anomalies 26	Suicide 28	Homicide 455	Homicide 473	Malignant Neoplasms 1,447	Unintentional Injury 1,967	Chronic Low. Respiratory Disease 1,935	Chronic Low. Respiratory Disease 15,122	Chronic Low. Respiratory Disease 17,935
4	Unintentional Injury 223	Malignant Neoplasms 38	Homicide 17	Homicide 23	Malignant Neoplasms 172	Heart Disease 434	Suicide 804	Suicide 972	Diabetes Mellitus 1,343	Cerebro-vascular 13,303	Cerebro-vascular 15,521
5	Maternal Pregnancy Comp. 172	Influenza & Pneumonia 21	Benign Neoplasms ---	Congenital Anomalies 18	Heart Disease 136	Malignant Neoplasms 388	Homicide 272	Liver Disease 786	Unintentional Injury 1,256	Alzheimer's Disease 9,057	Unintentional Injury 12,648
6	Placenta Cord Membranes 94	Heart Disease 18	Chronic Low. Respiratory Disease ---	Heart Disease 14	Congenital Anomalies 34	Cerebro-vascular 70	Diabetes Mellitus 232	Cerebro-vascular 675	Cerebro-vascular 1,203	Nephritis 5,908	Alzheimer's Disease 9,154
7	Bacterial Sepsis 88	Septicemia 13	Heart Disease ---	Influenza & Pneumonia 13	Influenza & Pneumonia 31	HIV 61	Cerebro-vascular 221	Diabetes Mellitus 660	Liver Disease 746	Diabetes Mellitus 5,845	Diabetes Mellitus 8,162
8	Circulatory System Disease 85	Chronic Low. Respiratory Disease 12	Cerebro-vascular ---	Chronic Low. Respiratory Disease 12	Chronic Low. Respiratory Disease 25	Diabetes Mellitus 59	Liver Disease 221	Chronic Low. Respiratory Disease 657	Nephritis 629	Influenza & Pneumonia 4,981	Nephritis 6,986
9	Respiratory Distress 85	Anemias ---	Diabetes Mellitus ---	Cerebro-vascular ---	Cerebro-vascular 20	Influenza & Pneumonia 55	HIV 191	Septicemia 304	Suicide 581	Unintentional Injury 3,866	Influenza & Pneumonia 5,911
10	Necrotizing Enterocolitis 72	Benign Neoplasms ---	Perinatal Period ---	Diabetes Mellitus ---	Diabetes Mellitus 15	Congenital Anomalies 45	Chronic Low. Respiratory Disease 123	Nephritis 291	Septicemia 557	Septicemia 3,127	Septicemia 4,183
11	Neonatal Hemorrhage 64	Perinatal Period ---	Four Tied ---	Five Tied ---	Septicemia 15	Septicemia 37	Nephritis 96	Influenza & Pneumonia 259	Influenza & Pneumonia 406	Parkinson's Disease 2,297	Suicide 4,115

Note: For leading cause categories, counts less than 10 deaths have been suppressed (---). Source: National Center for Injury Prevention and Control CDC, National Center for Health Statistics Vital Statistics System, WISQARS

Figure 4. Percent of injury deaths according to intent, Indiana, 2006–2010



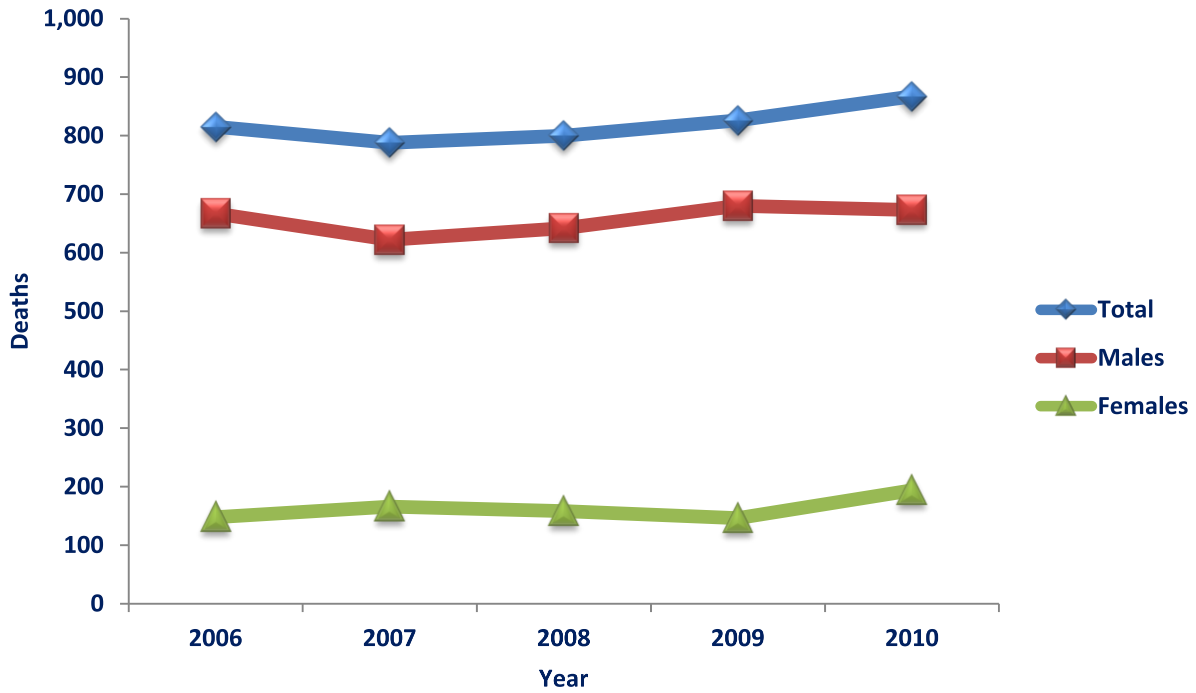
Source: Indiana State Department of Health, Epidemiology Resource Center

Table 3. Comparison of suicide rates*, 2005–2009

Age in Years	Indiana		United States		Midwest	
	Number	**Death Rate**	**Number**	**Death Rate**	**Number**	**Death Rate**
10–24	**525**	**7.78**	22,350	7.09	5,338	7.58
25–64	**2,893**	**17.45**	123,331	15.48	26,988	15.51
65+	**578**	**14.44**	27,737	14.59	5,409	12.53
Total	**3,996**	**12.54**†	173,479	11.31†	37,743	11.22†

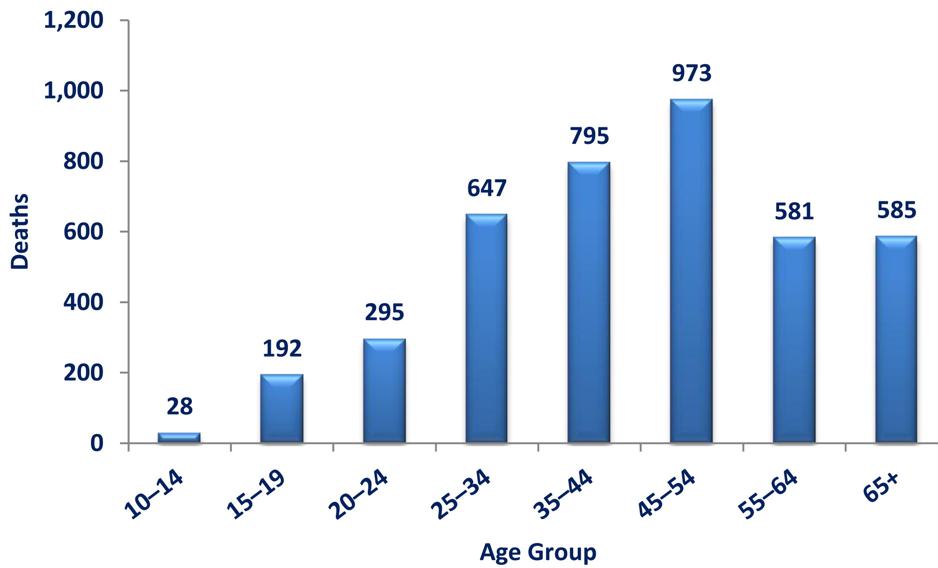
*Rates per 100,000 population
†Age-adjusted rates
Source: National Center for Injury Prevention and Control CDC, National Center for Health Statistics Vital Statistics System, WISQARS

Figure 5. Suicide, Indiana, 2006–2010



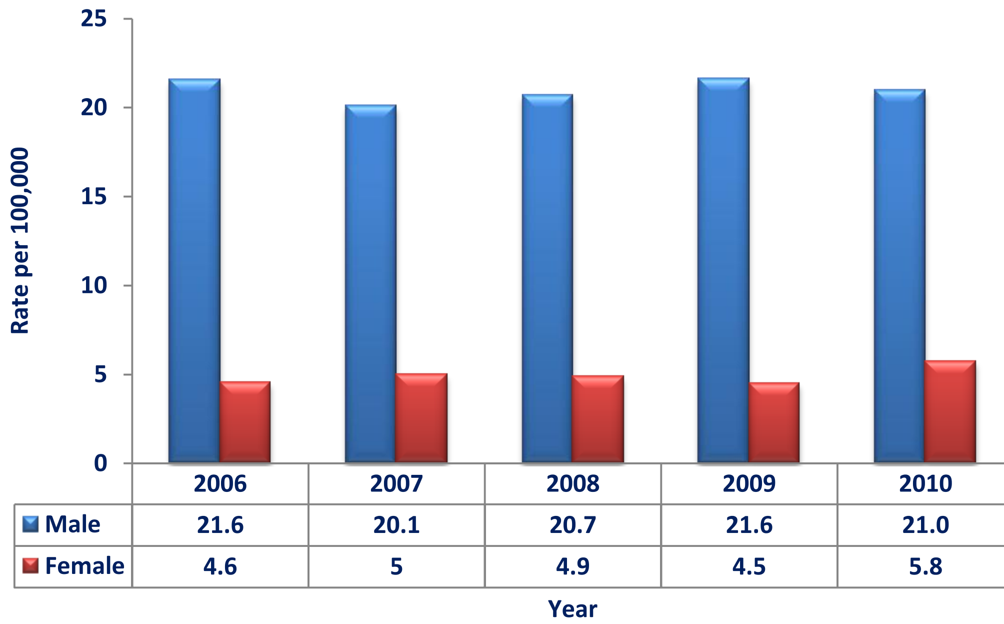
Source: Indiana State Department of Health, Epidemiology Resource Center

Figure 6. Suicide by age group, Indiana, 2006–2010



Source: Indiana State Department of Health, Epidemiology Resource Center

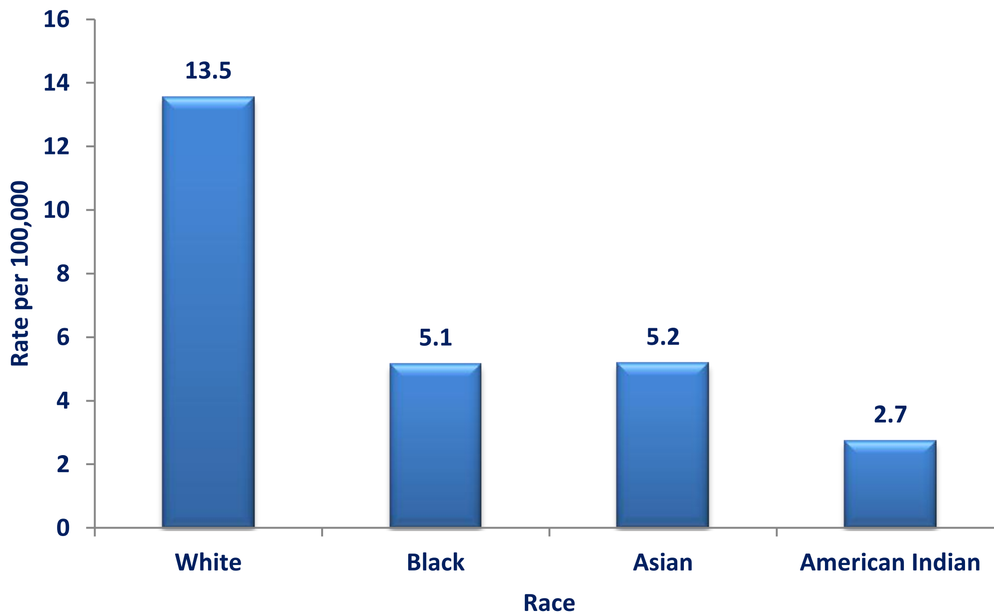
Figure 7. Suicide rates* by sex, Indiana, 2006–2010



	2006	2007	2008	2009	2010
Male	21.6	20.1	20.7	21.6	21.0
Female	4.6	5	4.9	4.5	5.8

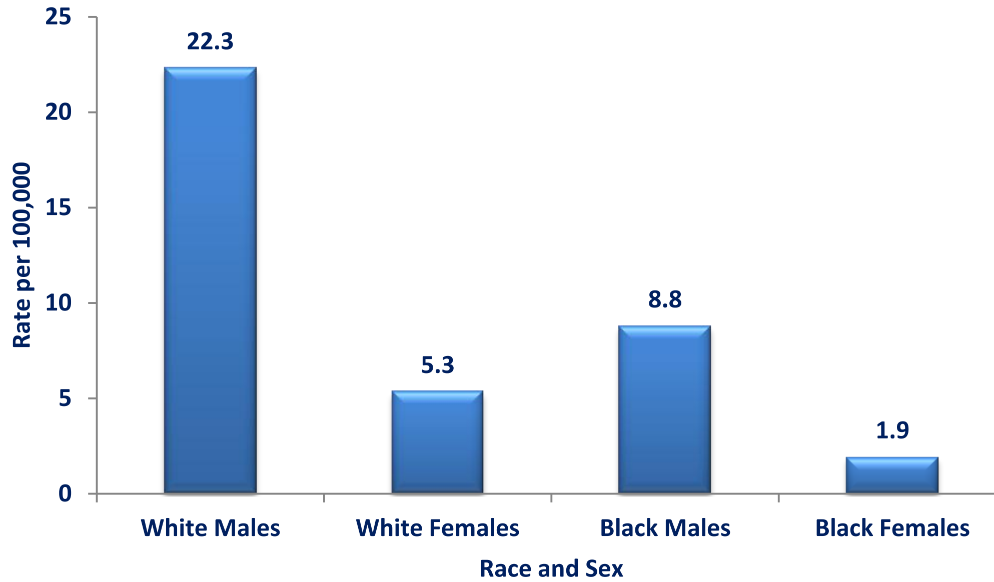
*Age-adjusted rates per 100,000 population
Source: Indiana State Department of Health, Epidemiology Resource Center

Figure 8. Suicide rates* by race, Indiana, 2006–2010



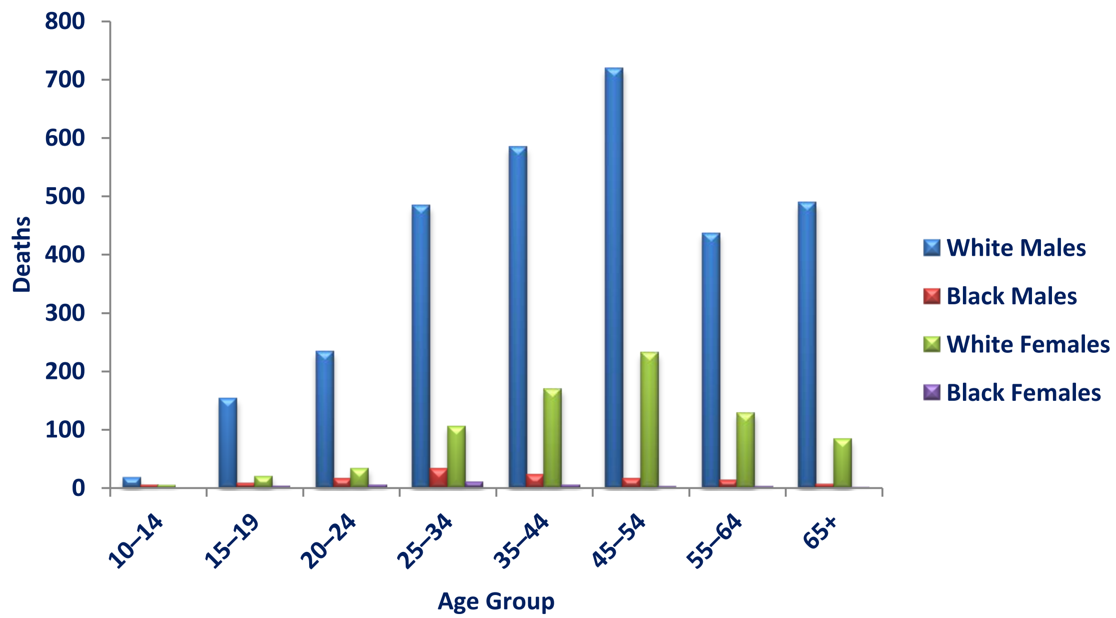
*Age-adjusted rates per 100,000 population
Source: Indiana State Department of Health, Epidemiology Resource Center

Figure 9. Suicide rates* by race and sex, Indiana, 2006–2010



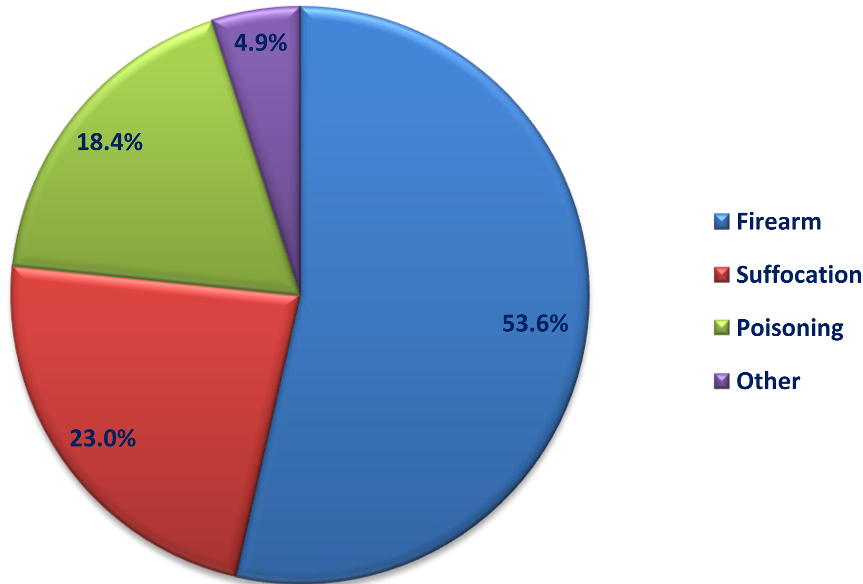
*Age-adjusted rates per 100,000 population
Source: Indiana State Department of Health, Epidemiology Resource Center

Figure 10. Suicide by sex and age, Indiana, 2006–2010



Source: Indiana State Department of Health, Epidemiology Resource Center

Figure 11. Suicide by mechanism, Indiana, 2006–2010



Source: Indiana State Department of Health, Epidemiology Resource Center

Table 4. Suicide rates* by mechanism, race, and sex, Indiana, 2006–2010

Mechanism	White Males	Black Males	White Females	Black Females
	Number Death Rate	Number Death Rate	Number Death Rate	Number Death Rate
Firearms	1,821 13.0	74 5.7	266 1.82	†
Suffocation	739 5.4	26 1.8	141 1.0	†
Poisoning	411 2.9	†	322 2.2	†

*Age-adjusted rates per 100,000 population
†Suicide deaths 20 or fewer do not produce stable rates and therefore are not included.
Source: Indiana State Department of Health, Epidemiology Resource Center

Years of Potential Life Lost (YPLL)

Years of potential life lost indicates the number of years lost due to premature death, defined as death before age 65. YPLL is used to quantify social and economic loss associated with premature death, and has been promoted to emphasize specific causes of death affecting younger age groups.[13] Table 5 presents this measure of the burden of suicide during 2005 to 2010 in Indiana. Table 6 provides a comparison of the YPLL rate of suicide to other causes of death in Indiana and the U.S. Suicide accounted for nearly 17,549 years of life lost in Indiana in 2010, and while suicide was the 11th leading cause of death among Hoosiers, it was the fifth leading cause of YPLL (Table 7). Suicide is a leading cause of death among youth and young adults, and contributes to substantial premature mortality, thus resulting in a high YPLL.

Table 5. Years of YPLL and YPLL rate* due to suicide, Indiana, 2005–2010

	2005	2006	2007	2008	2009	2010
YPLL	16,214	17,846	16,788	16,370	17,264	17,549
YPLL rate per 100,000	300	329	309	305	319	320

*Age-adjusted rates per 100,000 population
Source: National Center for Injury Prevention and Control CDC, National Center for Health Statistics Vital Statistics System, WISQARS

Table 6. YPLL before age 65 by common causes of deaths, all races, Indiana and U.S., 2010

	Indiana		United States	
Cause	YPLL	YPLL Percent	YPLL	YPLL Percent
Unintentional Injury	47,252	18.3	2,083,297	18.9
Malignant Neoplasms	43,168	16.7	1,843,612	16.7
Heart Disease	32,930	12.7	1,348,874	12.2
Perinatal Period	19,668	7.6	786,472	7.1
Suicide	17,549	6.8	764,776	6.9

Source: National Center for Injury Prevention and Control CDC, National Center for Health Statistics Vital Statistics System, WISQARS

Table 7. Rate* of YPLL by common causes of death, Indiana, 2005–2010

Cause	2005	2006	2007	2008	2009	2010
Unintentional Injury	918	954	931	945	884	864
Malignant neoplasms	752	759	722	695	732	708
Heart Disease	630	627	607	596	582	554
Perinatal Period	409	393	399	331	371	359
Suicide	300	329	309	305	319	320

*Age-adjusted rates per 100,000 population
Source: National Center for Injury Prevention and Control CDC, National Center for Health Statistics Vital Statistics System, WISQARS

Suicide Survivors

The designation of "survivor of suicide" refers to the family and friends who are directly affected and impacted by the suicide death of their loved one. This definition does not represent all the people affected by the suicide (e.g., school, church, community, etc.), but those considered family and close friends.[14] Survivors represent "the largest mental health casualties related to suicide" because survivors themselves are at an increased risk of suicide. Numbers of survivors are difficult to determine; however, it is estimated that for every suicide, an average of six people suffer intense grief.[15] Based on this estimate, in 2010, there were 5,184 suicide survivors in Indiana, and it is estimated during 2009, 1 out of every 65 Americans is a survivor of suicide.[1,16]

Suicide Attempt in the United States

In 2007-2008, it is estimated 569,000 persons visited emergency departments for nonfatal suicidal behaviors, of whom, it is estimated 70 percent had attempted suicide. This number reflects the notion that suicide is only a portion of the number of persons affected by suicidal thoughts and behaviors.[6] However, there is no official source of national data on suicide attempts because not all attempts require medical attention, and those that do may not be identified or correctly coded as suicide attempts. It is generally estimated that there are 25 attempts for each suicide death.[5,16] Based on this estimate, approximately 959,100 suicide

attempts were made in 2010 in the U.S.[11] Females, youths, and older adults attempt suicide more often compared to other populations. For every suicide death, there are an estimated 100 to 200 youth who attempt suicide, and 4 attempts in the elderly population. [5,16] Whites attempt suicide at higher rates than other races, with white females attempting suicide three times more often than white males.[5]

Suicide Attempt in Indiana

The ISDH hospital discharge data set gives an indication of the number of attempted suicides in Indiana, although with some limitations. The International Classification of Disease Revision 9 Clinical Modification (ICD-9-CM) coding scheme includes external cause of injury codes, or E-codes, that indicate the source or cause of the injury, intentionality, and in some cases, location of occurrence. However, E-codes are not yet mandated by law in Indiana, and it is estimated that only 70 percent of hospital discharge records contain them.[2] Therefore, the total number of suicide attempts is a gross underestimation of the true amount.

E-codes specific to suicide or attempted suicide (self-inflicted injuries specified as intentional) include E950–E959. However, the data are not sensitive enough to distinguish which self-inflicted injuries are related to a self-mutilation disorder versus attempted suicide. Also, the ISDH hospital database does not contain a patient-specific unique identifier, meaning that it does not distinguish whether one person had five visits or whether five people visited once. Therefore, statistics only reflect visits and not specific numbers of people. Another limitation is that race/ethnicity is reported at the discretion of the person completing the death certificate and may not reflect how an individual would define his or her own race.

A final limitation of the hospital discharge data is that not all hospitals submit discharge data. Data submission compliance among hospitals varies by year, but typically a few acute and psychiatric/behavioral hospitals do not report. As a result, the total number of attempts for the inpatient and ED/ outpatient data is an underestimation of the actual number of suicide attempts and should be used with caution.

Hospital Inpatient Data

The 2007 to 2011 Indiana inpatient hospital discharge data set totaled 3,794,529 records. Of these, 164,504 had a principle diagnosis of injury and poisoning. A query was conducted for suicide-related E-codes, yielding over 8 percent (12,892) of patients with self-inflicted injuries.[2] The number of self-inflicted hospitalizations remained fairly stable over the five-year period (Figure 12). The average age for suicide attempt was 37 years old. Fifty-eight percent

(7,525/12,892) of the attempts were made by females, and 42 percent (5,366/12,892) of attempts were made by males. White females had the highest rate of injury among ages 35–44 years, followed by the second highest rate among white females ages 15–19 years. Black females had a higher rate of self-inflicted injury compared to white females in the 20–24 age group. Among adults ages 85 and older, white males had the highest rate of injury (Figure 13).[2]

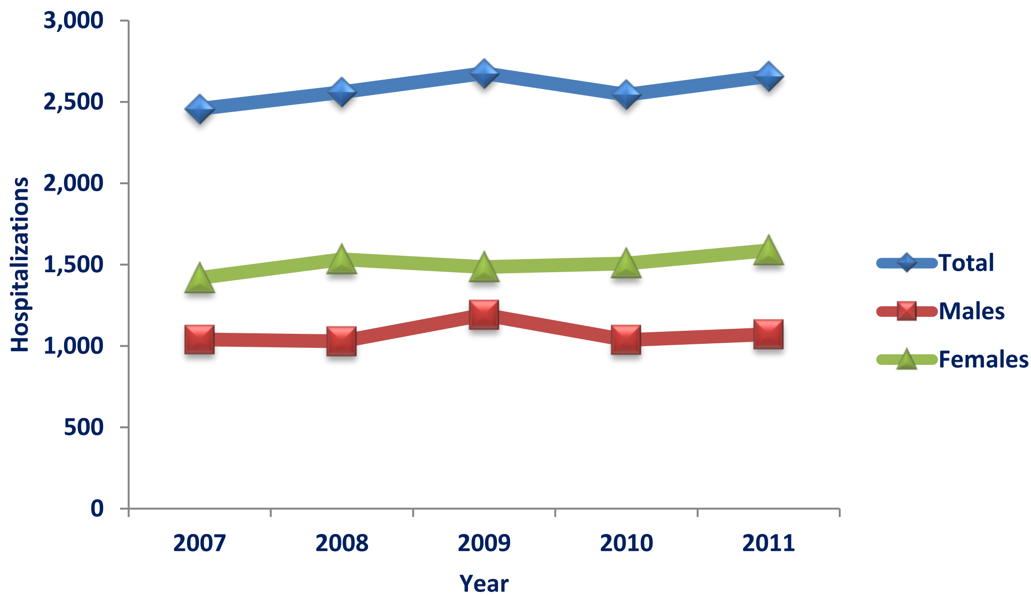
Fifty-six percent of the patients were admitted to inpatient care from ED/outpatient centers. Patients were also admitted to hospitals from routine office visits (33 percent), transferred from other hospitals (nine percent) and other sources (three percent). The majority of patients were admitted as an emergency (81 percent) followed by those classified as “urgent” (11 percent). Seven percent of patients admitted themselves to the hospital. Critical care days, meaning the number of days a patient spent in either an intensive care unit, critical care unit or other specialized intensive care unit of a facility during hospitalization, ranged from zero to 71 days, with 27 percent of the patients requiring at least one day of critical care.[2]

Although detailed analysis by cost is unavailable, 33.7 percent of patients who attempted suicide identified Medicare and/or Medicaid and 34.2 percent identified managed care organizations and/or commercial insurance as their primary source of payment (Table 8). The median total cost in Indiana for the 12,892 self-inflicted injuries was $8,888 (Range $158–$1,847,887) for the five-year period.[2] The total cost for all inpatient care related to self-inflicted injuries for 2007–2011 was nearly $190 million.[2]

Table 9 lists the E-codes associated with suicide attempts including the methods or cause of suicide attempt from 2007 to 2011. The overwhelming majority of hospital admissions for attempted suicide involved self-inflicted poisoning by solid or liquid substances (92.1 percent or 11,877 incidents). The substances used most frequently in poisoning include benzodiazepine-based tranquilizers (chlordiazepoxide, diazepam, flurazepam, lorazepam, medazepam, and nitrazepam) (19.8 percent), analgesics (pain relievers) (14.3 percent), and antidepressants (amitriptyline, imipramine, and monoamine oxidase [MAO] inhibitors) (6.3 percent) (Table 10).[2]

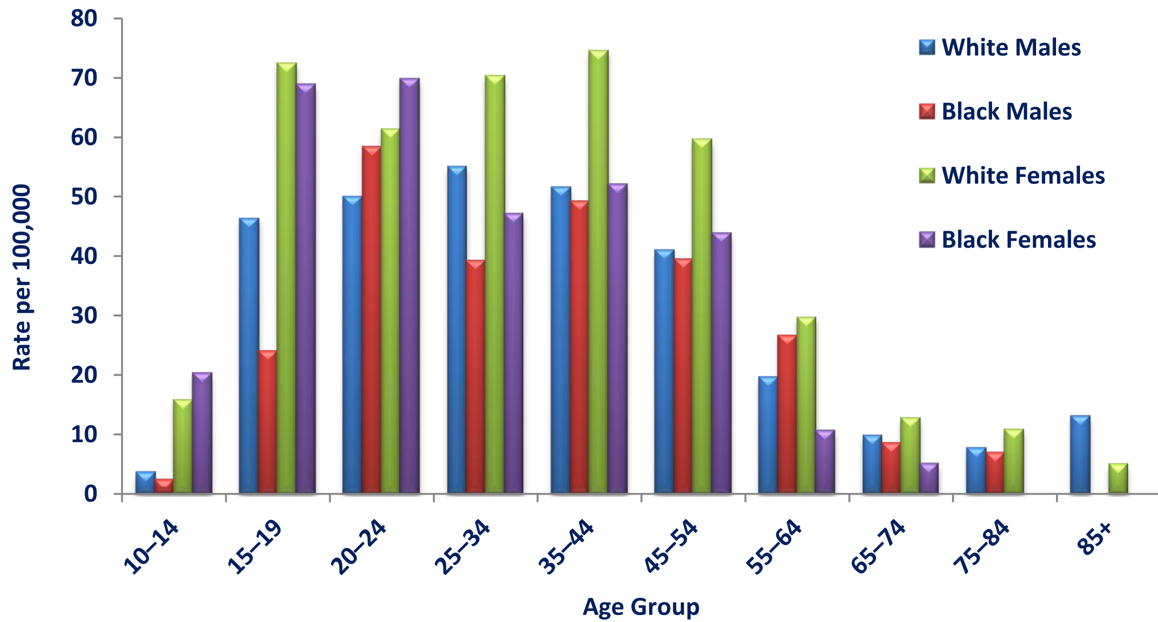
Other methods of attempting suicide included cutting or piercing (3.2 percent or 414 incidents) and use of firearms, air guns, or explosives (1.9 percent or 244 incidents). Hospitalizations resulting from suicide attempts by firearm are less common because these injuries are more likely to be fatal. Other suicide attempts, including poisoning via carbon monoxide, hanging or strangulation, jumping from high places, and other unspecified means involved less than 5.4 percent of hospital admissions for suicide attempt (Table 9).[2]

Figure 12. Self-inflicted injury hospitalizations, Indiana, 2007–2011



Source: Indiana Hospital Association, Hospital Discharge Data

Figure 13. Self-inflicted injury hospitalization rates by age and race, Indiana, 2007–2011



Source: Indiana Hospital Association, Hospital Discharge Data

Table 8. Primary payor of hospitalizations, Indiana, 2007–2011

Primary Payor	Frequency	Percent
Commercial Insurance (Includes Managed Care)	4,411	34.2
Self-Pay	2,984	23.1
Medicaid	2,388	18.5
Medicare	1,964	15.2
Other/Unknown	608	4.7
Other Government	537	4.2

Source: Indiana Hospital Association, Hospital Discharge Data

Table 9. E-code distribution for self-inflicted injury hospitalizations, Indiana, 2007–2011

ECODE	Description	Frequency	Percent
E950	**Suicide and self-inflicted poisoning by solid or liquid substance**	**11,877**	**92.1**
E950.0	Analgesics, antipyretics, and antirheumatics	3,306	
E950.1	Barbiturates	65	
E950.2	Other sedatives and hypnotics	478	
E950.3	Tranquilizers and other psychotropic agents	4,927	
E950.4	Other specified drugs and medicinal substances	2,313	
E950.5	Unspecified drug or medicinal substance	272	
E950.6	Agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers	29	
E950.7	Corrosive and caustic substances *(Suicide and self-inflicted poisoning by substances classifiable to E846)*	74	
E950.8	Arsenic and its compounds	1	
E950.9	Other and unspecified solid and liquid substances	412	
E951	**Suicide and self-inflicted poisoning by gases in domestic use**	**5**	**<0.1**
E951.0	Gas distributed by pipeline	0	
E951.1	Liquefied petroleum gas distributed in mobile containers	2	
E951.8	Other utility gas	3	
E952	**Suicide and self-inflicted poisoning by other**	**87**	**0.7**

	gases and vapors		
E952.0	Motor vehicle exhaust gas	61	
E952.1	Other carbon monoxide	13	
E952.8	Other specified gases and vapors	12	
E952.9	Unspecified gases and vapors	1	
E953	**Suicide and self-inflicted injury by hanging, strangulation, and suffocation**	**98**	**0.8**
E953.0	Hanging	94	
E953.1	Suffocation by plastic bag	0	
E953.8	Other specified means	2	
E953.9	Unspecified means	2	
E954	**Suicide and self-inflicted injury by submersion [drowning]**	**1**	**<0.1**
E955	**Suicide and self-inflicted injury by firearms, air guns, and explosives**	**244**	**1.9**
E955.0	Handgun	91	
E955.1	Shotgun	14	
E955.2	Hunting rifle	8	
E955.3	Military firearm	1	
E955.4	Other and unspecified firearm *(Gunshot, not otherwise specified; Shot, not otherwise specified)*	85	
E955.5	Explosives	0	
E955.6	Air gun (BB gun, Pellet gun)	3	
E955.7	Paintball gun	0	
E955.9	Unspecified	42	
E956	**Suicide and self-inflicted injury by cutting and piercing instrument**	**414**	**3.2**
E957	**Suicide and self-inflicted injury by jumping from high place**	**41**	**0.3**
E957.0	Residential premises	12	
E957.1	Other man-made structure	25	
E957.2	Natural site	0	
E957.9	Unspecified	4	
E958	**Suicide and self-inflicted injury by other and unspecified means**	**121**	**0.9**
E958.0	Jumping or lying before moving object	7	
E958.1	Burns, fire	17	
E958.2	Scald	0	
E958.3	Extremes of cold	3	
E958.4	Electrocution	0	
E958.5	Crashing of motor vehicle	25	

E958.6	Crashing of aircraft	0	
E958.7	Caustic substances, except poisoning *(Excludes poisoning by caustic substances [E950.7])*	5	
E958.8	Other specified means	54	
E958.9	Unspecified means	10	
E959	**Late effects of self-inflicted injury**	**5**	**<0.1**

Source: Indiana Hospital Association, Hospital Discharge Data

Table 10. Five most frequently reported ICD-9-CM classification codes among persons who attempted suicide, hospitalizations, Indiana, 2007–2011

ICD-9-CM Code	Description	Frequency	Percent*
969.4	Benzodiazepine-based tranquilizers (chlordiazepoxide, diazepam, flurazepam, lorazepam, medazepam, nitrazepam)	2,557	19.8
965.4	Aromatic Analgesics, Not Elsewhere Classified (acetanilid, paracetamol [acetaminophen], phenacetin [acetophenetidin])	1,847	14.3
969.0	Antidepressants (amitriptyline, imipramine, monoamine oxidase [MAO] inhibitors)	815	6.3
969.3	Other antipsychotics, neuroleptics, and major tranquilizers)	703	5.5
965.09	Other (codeine [methylmorphine], meperidine [pethidine], morphine)	474	3.7

*Percent is based off of the total number of suicide attempts.
Source: Indiana Hospital Association, Hospital Discharge Data

Emergency Department (ED) Data

The 2007–2011 Indiana emergency department (ED)/outpatient discharge data set totaled 11,888,759 records. Of these, 2,783,381 had a principle diagnosis of injury and poisoning. A query was done for suicide-related E-codes, yielding 21,296 patients with self-inflicted injuries specified as injuries in suicide or attempted suicide. Suicide-related ED visits accounted for nearly eight percent of the total number of injury-related ED visits. The number of self-inflicted injury ED visits remained fairly stable during the five-year period, ranging from a low of 3,944 to a high of 4,458 (Figure 14). The average age of attempted suicide was 30 years. Fifty-eight percent (12,427/21,296) of the attempts were made by females, and 42 percent (8,869/21,296) were made by males. The largest numbers of injuries (27 percent or 5,751 incidents) occurred

among white females age 15–19 years, 25–34 years and 35–44 years. Black females had the highest total rate of injuries due to attempted suicide compared to all other race/sex categories followed by white females (Figure 15).

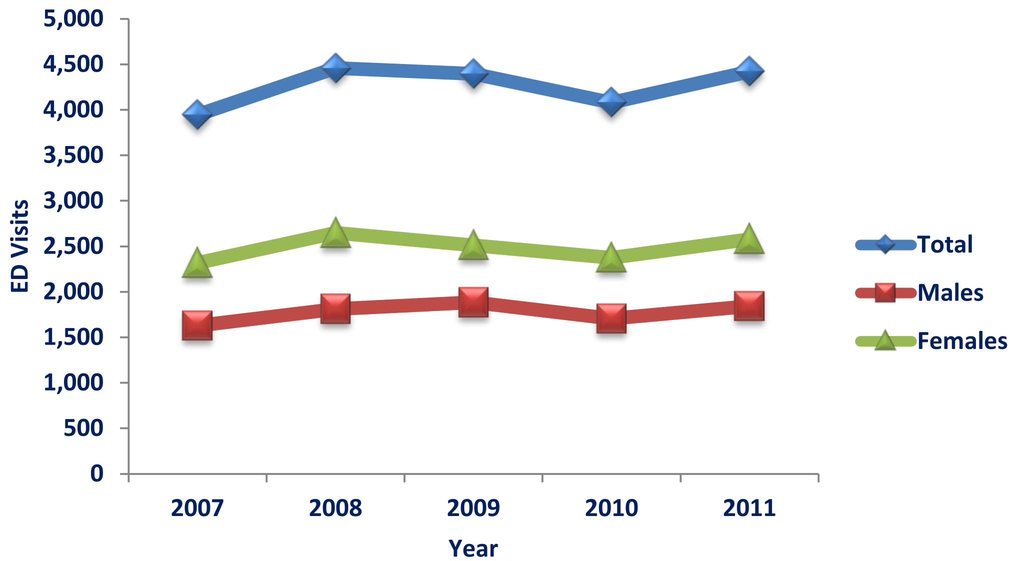
Fifty-eight percent of the patients were seen at ED/outpatient centers. Patients were also seen at routine outpatient visits (39 percent), transferred from other sources (0.3 percent) and other (3 percent). The majority of patients admitted (61 percent) are coded as an emergency.[3]

Although detailed analysis by cost is unavailable, 32.1 percent of patients identified Medicare and/or Medicaid, and 33.3 percent identified managed care organizations and/or commercial insurance as their primary source of payment (Table 11). The median total cost of Indiana residents with an E-code indicating suicide at an ED/outpatient center for the five-year period was $2,536 (range $83–74,573). The total charges for all ED care related to self-inflicted injuries during 2007 to 2011 was nearly $67 million.[3]

Table 12 shows a listing of the E-codes associated with suicide attempts, including methods and means. The majority of hospital ED/outpatient visits for attempted suicide involved self-inflicted poisoning by solid or liquid substances (68.5 percent or 14,598 incidents). The substances used most frequently are controlled prescriptions for benzodiazepine-based tranquilizers (chlordiazepoxide, diazepam, flurazepam, lorazepam, medazepam, and nitrazepam) (23.5 percent) and analgesics (pain relievers) (7.7 percent) (Table 13).[3]

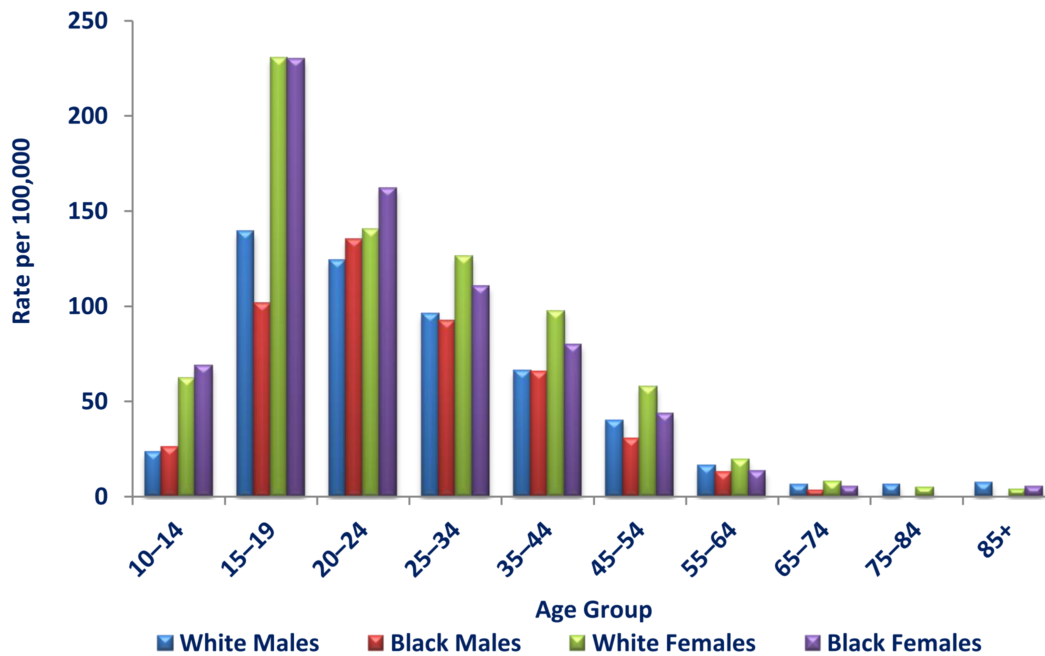
Other methods of attempting suicide included cutting or piercing (22.2 percent or 4,723 incidents) and use of firearms or explosives (1.1 percent or 241 incidents). ED visits for suicide attempts by firearm are less common because these injuries are more likely to be fatal. Other suicide attempts, including poisoning via carbon monoxide, hanging or strangulation, jumping from high places, and other unspecified means each involved less than 8.2 percent of ED/outpatient visits for suicide attempts (Table 12).[3]

Figure 14. Self-inflicted injury emergency department (ED) visits, Indiana, 2007–2011



Source: Indiana Hospital Association, Hospital Discharge Data

Figure 15. Self-inflicted injury ED visit rates by age and race, Indiana, 2007–2011



Source: Indiana Hospital Association, Hospital Discharge Data

Table 11. Primary payor of ED visits, Indiana, 2007–2011

Primary Payor	Frequency	Percent
Commercial Insurance (Includes Managed Care)	7,119	33.3
Self-Pay	5,328	24.9
Medicaid	4,989	23.3
Medicare	1,886	8.8
Other/Unknown	1,508	7.1
Other Government	551	2.6

Source: Indiana Hospital Association, Hospital Discharge Data

Table 12. Summary of E-code distribution for self-inflicted injury ED visits, Indiana, 2007–2011

ECODE	Description	Frequency	Percent
E950	**Suicide and self-inflicted poisoning by solid or liquid substance**	**14,663**	**68.5**
E950.0	Analgesics, antipyretics, and antirheumatics	4,003	
E950.1	Barbiturates	29	
E950.2	Other sedatives and hypnotics	636	
E950.3	Tranquilizers and other psychotropic agents	5,784	
E950.4	Other specified drugs and medicinal substances	2,958	
E950.5	Unspecified drug or medicinal substance	670	
E950.6	Agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers	19	
E950.7	Corrosive and caustic substances *(Suicide and self-inflicted poisoning by substances classifiable to E846)*	118	
E950.8	Arsenic and its compounds	3	
E950.9	Other and unspecified solid and liquid substances	443	
E951	**Suicide and self-inflicted poisoning by gases in domestic use**	**6**	**<0.1**
E951.0	Gas distributed by pipeline	1	
E951.1	Liquefied petroleum gas distributed in mobile containers	5	
E951.8	Other utility gas	0	
E952	**Suicide and self-inflicted poisoning by other**	**193**	**0.9**

	gases and vapors		
E952.0	Motor vehicle exhaust gas	127	
E952.1	Other carbon monoxide	22	
E952.8	Other specified gases and vapors	39	
E952.9	Unspecified gases and vapors	5	
E953	**Suicide and self-inflicted injury by hanging, strangulation, and suffocation**	**221**	**1.0**
E953.0	Hanging	188	
E953.1	Suffocation by plastic bag	2	
E953.8	Other specified means	26	
E953.9	Unspecified means	5	
E954	**Suicide and self-inflicted injury by submersion [drowning]**	**5**	**<0.1**
E955	**Suicide and self-inflicted injury by firearms, air guns, and explosives**	**243**	**1.1**
E955.0	Handgun	80	
E955.1	Shotgun	26	
E955.2	Hunting rifle	12	
E955.3	Military firearm	0	
E955.4	Other and unspecified firearm *(Gunshot, not otherwise specified; Shot, not otherwise specified)*	82	
E955.5	Explosives	0	
E955.6	Air gun (BB gun, Pellet gun)	17	
E955.7	Paintball gun	0	
E955.9	Unspecified	26	
E956	**Suicide and self-inflicted injury by cutting and piercing instrument**	**4,733**	**22.2**
E957	**Suicide and self-inflicted injury by jumping from high place**	**64**	**0.3**
E957.0	Residential premises	15	
E957.1	Other man-made structure	43	
E957.2	Natural site	1	
E957.9	Unspecified	5	
E958	**Suicide and self-inflicted injury by other and unspecified means**	**1,237**	**5.8**
E958.0	Jumping or lying before moving object	20	
E958.1	Burns, fire	47	
E958.2	Scald	4	
E958.3	Extremes of cold	4	
E958.4	Electrocution	4	
E958.5	Crashing of motor vehicle	31	

E958.6	Crashing of aircraft	0	
E958.7	Caustic substances, except poisoning *(Excludes poisoning by caustic substances [E950.7])*	2	
E958.8	Other specified means	974	
E958.9	Unspecified means	151	
E959	**Late effects of self-inflicted injury***	17	**0.1**

Source: Indiana Hospital Association, Hospital Discharge Data

Table 13. Five most frequently reported ICD-9-CM classification codes among persons who attempted suicide, ED visits, Indiana, 2007–2011

ICD-9-CM Code	Description	Frequency	Percent*
969.4	Benzodiazepine-based tranquilizers (chlordiazepoxide, diazepam, flurazepam, lorazepam, medazepam, nitrazepam)	2,860	23.5
965.4	Aromatic Analgesics, Not Elsewhere Classified (acetanilid, paracetamol [acetaminophen], phenacetin [acetophenetidin])	1,646	7.7
881.02	Open wound of wrist without mention of complication	1,535	7.2
881.0	Open wound of elbow, forearm, and wrist	1,246	5.9
969.0	Antidepressants (amitriptyline, imipramine, monoamine oxidase [MAO] inhibitors)	1,004	4.7

*Percent is based off of the total number of suicide attempts.
Source: Indiana Hospital Association, Hospital Discharge Data

Geographic Distribution

The number of suicide deaths and attempts in each Indiana county are displayed in Table 14 and are shown in map form in Figures 16, 17, and 18. Average age-adjusted rates are shown in parentheses for suicide deaths. However, rates are not included for suicide attempts due to the limitations of this data previously discussed.

Table 14. Suicide deaths (2006–2010), hospitalizations and ED visits (2007–2011) by county of residence, Indiana

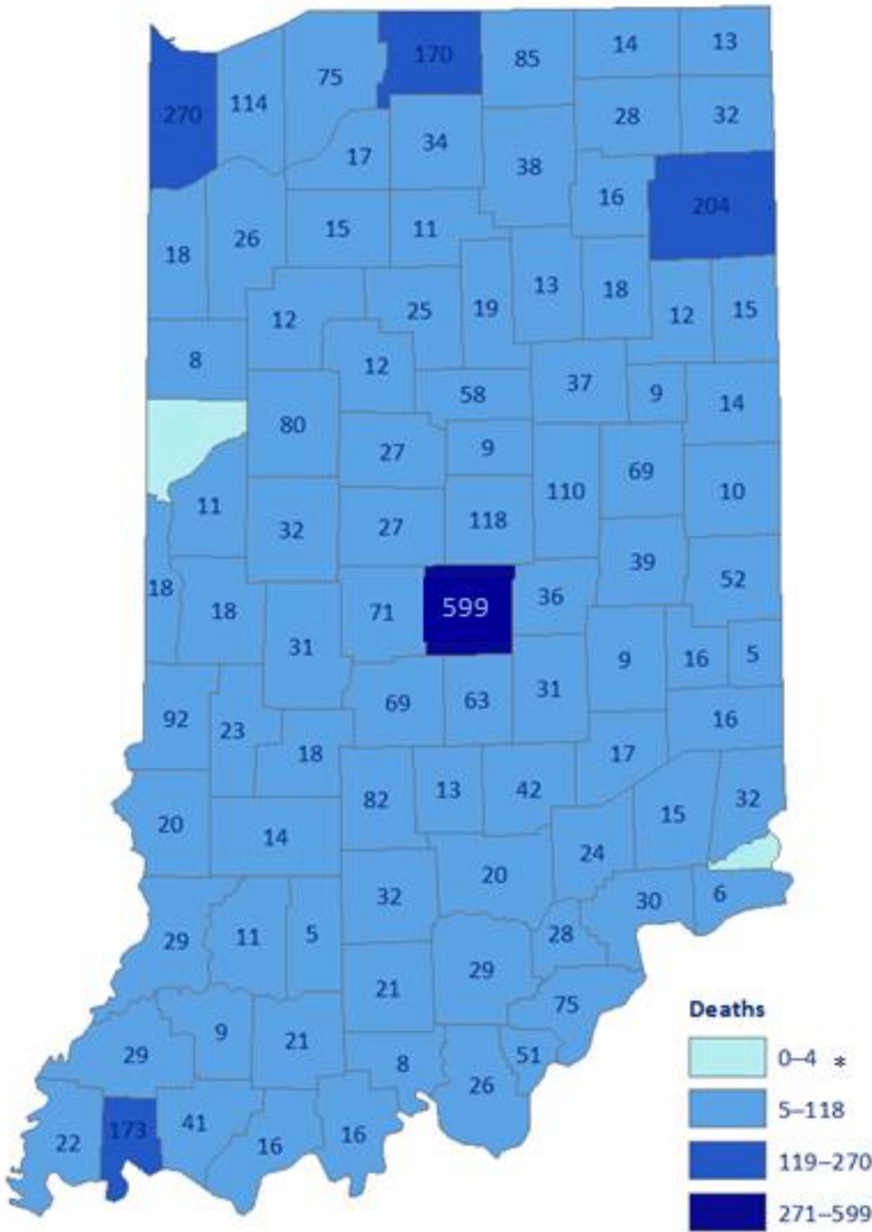
County ID	County Name	Suicides, (Age-adjusted rate)[‡]	Hospitalizations*, ([#])	ED Visits*, ([#])
01	Adams	15 (U)[§]	36	55
02	Allen	204 (11.7)	614	1,051
03	Bartholomew	42 (10.9)	151	326
04	Benton	8 (U)[§]	27	31
05	Blackford	9 (U)[§]	38	77
06	Boone	27 (9.9)	69	75
07	Brown	13 (U)[§]	10	20
08	Carroll	12 (U)[§]	17	43
09	Cass	25 (12.5)	44	46
10	Clark	75 (13.9)	164	250
11	Clay	23 (17.6)	83	177
12	Clinton	27 (16.8)	98	342
13	Crawford	8 (U)[§]	15	39
14	Daviess	11 (U)[§]	38	40
15	Dearborn	32 (11.9)	94	120
16	Decatur	17 (U)[§]	44	191
17	Dekalb	32 (15.8)	47	104
18	Delaware	69 (12.9)	382	365
19	Dubois	21 (10.3)	62	46
20	Elkhart	85 (8.7)	369	580
21	Fayette	16 (U)[§]	31	117
22	Floyd	51 (13.7)	170	280
23	Fountain	11 (U)[§]	39	96
24	Franklin	16 (U)[§]	9	28
25	Fulton	11 (U)[§]	35	120
26	Gibson	29 (16.3)	60	108
27	Grant	37 (11.2)	52	132
28	Greene	14 (U)[§]	43	101
29	Hamilton	118 (8.9)	384	883
30	Hancock	36 (10.9)	61	108
31	Harrison	26 (12.9)	35	70
32	Hendricks	71 (10.2)	164	427
33	Henry	39 (16.2)	114	204
34	Howard	58 (13.7)	106	313
35	Huntington	18 (U)[§]	72	169
36	Jackson	20 (8.9)	80	61
37	Jasper	26 (16.2)	64	34

38	Jay	14 (U)[§]	66	104
39	Jefferson	30 (17.0)	50	258
40	Jennings	24 (16.4)	67	239
41	Johnson	63 (9.5)	220	578
42	Knox	29 (15.0)	151	106
43	Kosciusko	38 (9.8)	195	275
44	LaGrange	14 (U)[§]	34	106
45	Lake	270 (11.0)	718	369
46	LaPorte	75 (13.3)	178	331
47	Lawrence	32 (13.7)	80	237
48	Madison	110 (16.6)	263	396
49	Marion	599 (13.6)	2,193	4,515
50	Marshall	34 (14.4)	92	165
51	Martin	5 (U)[§]	20	24
52	Miami	19 (U)[§]	48	196
53	Monroe	82 (14.2)	164	266
54	Montgomery	32 (13.7)	112	240
55	Morgan	69 (19.4)	85	177
56	Newton	18 (U)[§]	20	14
57	Noble	28 (12.0)	63	164
58	Ohio	†	10	17
59	Orange	21 (20.9)	25	88
60	Owen	18 (U)[§]	31	43
61	Parke	18 (U)[§]	43	40
62	Perry	16 (U)[§]	38	107
63	Pike	9 (U)[§]	32	28
64	Porter	114 (13.6)	495	375
65	Posey	22 (17.9)	38	40
66	Pulaski	15 (U)[§]	24	114
67	Putnam	31 (16.9)	42	76
68	Randolph	10 (U)[§]	34	91
69	Ripley	15 (U)[§]	12	67
70	Rush	9 (U)[§]	30	34
71	St. Joseph	170 (12.8)	624	1,242
72	Scott	28 (23.0)	38	189
73	Shelby	31 (13.8)	37	68
74	Spencer	16 (U)[§]	16	33
75	Starke	17 (U)[§]	158	93
76	Steuben	13 (U)[§]	73	133
77	Sullivan	20 (17.2)	51	56
78	Switzerland	6 (U)[§]	16	25
79	Tippecanoe	80 (11.2)	517	691

80	Tipton	9 (U) [§]	26	83
81	Union	5 (U) [§]	7	8
82	Vanderburgh	173 (19.2)	410	528
83	Vermillion	18 (U) [§]	70	27
84	Vigo	92 (17.2)	671	195
85	Wabash	13 (U) [§]	46	61
86	Warren	†	7	24
87	Warrick	41 (14.3)	76	153
88	Washington	29 (20.1)	27	21
89	Wayne	52 (14.8)	167	224
90	Wells	12 (U) [§]	30	43
91	White	12 (U) [§]	71	170
92	Whitley	16 (U) [§]	56	114
99	Other[¶]	0	6	6
	Total	------	**12,892**	**21,296**

*Numbers based on hospital emergency department/outpatient center and inpatient data. Due to only 70% of hospital discharge records having E-codes, the numbers are a gross underestimation of the actual number of suicide attempts.
†The number of suicide deaths was less than 5 and is suppressed to protect confidentiality.
[‡]Age-adjusted rates per 100,000 population
[§] 'U' signifies that the age-adjusted rates are unstable due to less than 20 deaths for the county
¶ Attempts with incorrect zip codes
# Age adjusted rates are not included for attempt data due to the gross underestimation of the number of attempts. Attempt data must be used with caution.
Source: Indiana State Department of Health, Epidemiology Resource Center and Indiana Hospital Association, Hospital Discharge Data

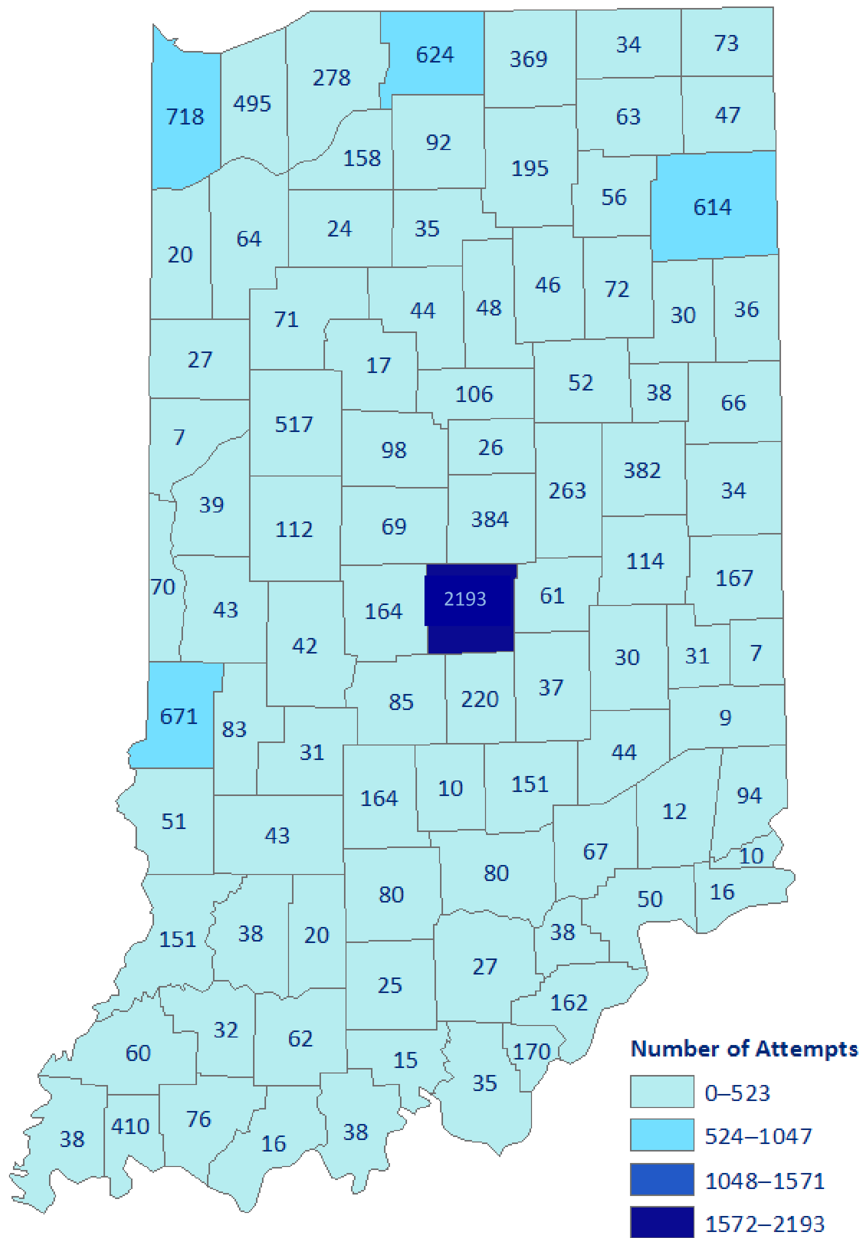
Figure 16. Suicide by county of residence, Indiana, 2006–2010



*The number of suicide deaths was less than 5 and is suppressed to protect confidentiality.

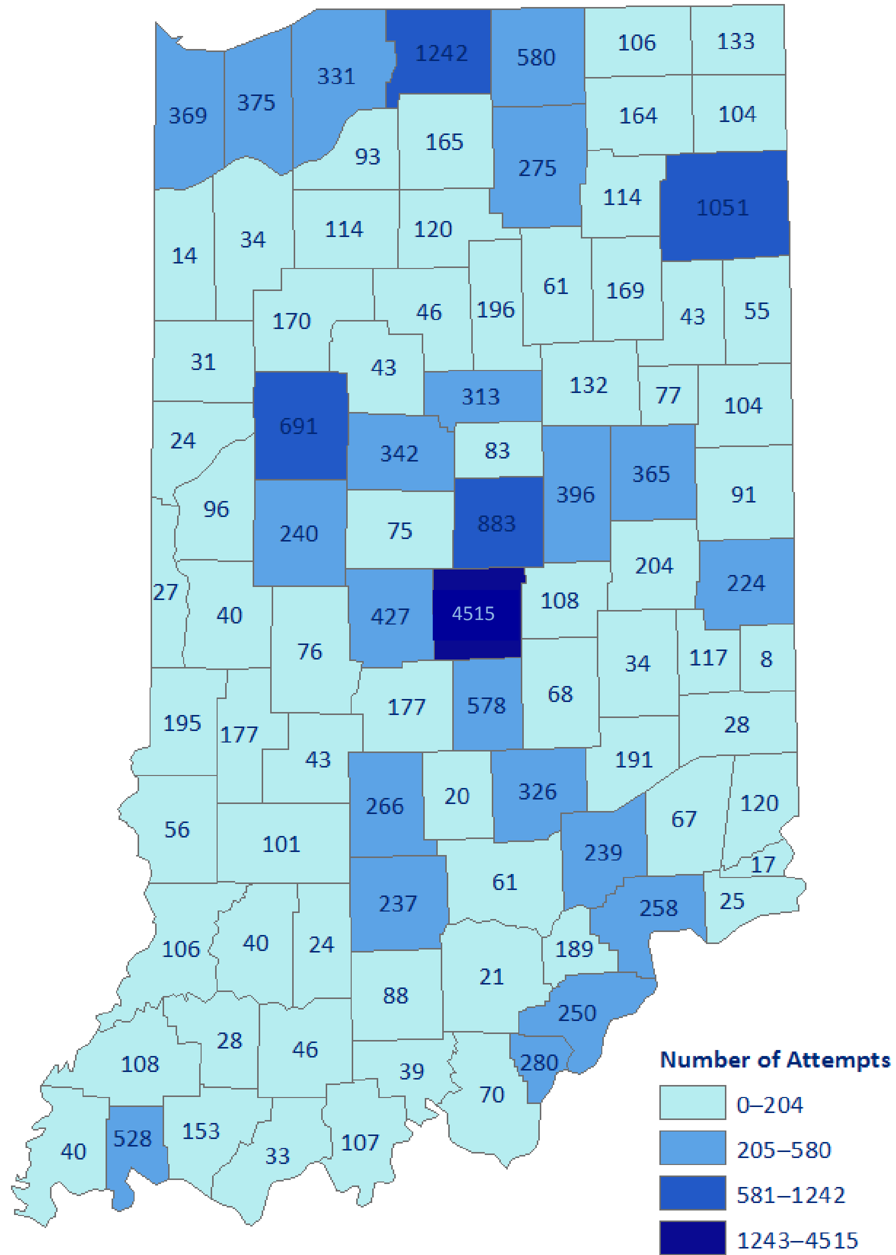
Source: Indiana State Department of Health, Epidemiology Resource Center

Figure 17. Self-inflicted injury hospitalizations by county of residence, Indiana, 2007–2011



Source: Indiana Hospital Association, Hospital Discharge Data

Figure 18. Self-Inflicted injury ED visits by county of residence, Indiana, 2007–2011



Source: Indiana Hospital Association, Hospital Discharge Data

Youth Suicide Attempt

Hospital Inpatient Data

A reported 1,722 Hoosiers ages 10–19 years were treated in an inpatient setting for attempted suicide or self-inflicted injury during 2007 to 2011, accounting for 13 percent of the total number of patients seen for self-inflicted injury. Fifteen to 19 year olds comprised the majority (86 percent) of these attempts. More specifically, whites accounted for 77 percent of youth attempts, of which 62 percent were white females and 38 percent were white males. Blacks accounted for 11 percent of youth attempted suicides, and other races accounted for 12 percent of all youth attempted suicides.[2]

Emergency Department Data

The 2007–2011 hospital discharge dataset was reviewed for youth suicide attempts. Based on a query completed in the ED/outpatient center database, 5,761 youth patients attempted suicide or had injuries consistent with self-inflicted intentional injuries, accounting for 27 percent of the total number of ED/outpatient center patients seen for self-inflicted injury. Fifteen to 19 year olds comprised the majority (81 percent) of these attempts. More specifically, whites accounted for 76 percent of youth attempts, of which 63 percent were white females and 37 percent were white males. Blacks accounted for 13 percent of youth attempted suicide, while other races accounted for 10 percent of all youth attempted suicides.[3]

Behavior Survey Data

The Youth Risk Behavior Survey (YRBS) was developed in 1990 to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability and social problems among youth in the U.S. The Indiana Youth Risk Behavior Survey is conducted every two years among students in grades 9-12. In 2011, 44 high schools and 2,855 students participated in the survey, allowing for appropriate conclusion to be drawn due to a statistically significant population size. [4,17] According to the 2009 and 2011 Indiana YRBS, the percentage of youth who reported having attempted suicide one or more times during the past 12 months increased from 9.3 percent to 11.0 percent. In 2011, Indiana had a higher percentage of students requiring medical attention after a suicide attempt than the national average (Table 15).[17]

Table 15. Youth Risk Behavior Survey results, 9-12, Indiana, 2011

Health-risk Behavior	United States		Indiana	
During the 12 months prior to the survey, students in grades 9-12:	Total Percent	95% CI	Total Percent	95% CI
Felt sad or hopeless almost every day for 2 or more weeks in a row, so that they stopped doing some usual activities	28.5	(27.2–29.7)	29.1	(26.3–31.9)
Seriously considered attempting suicide	15.8	(15.1–16.5)	18.9	(15.8–22.5)
Made a plan about how they would attempt suicide	12.8	(12.0–13.6)	13.6	(11.9–15.5)
Attempted suicide one or more times	7.8	(7.1–8.5)	11.0	(8.9–13.4)
Suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse	2.4	(2.0–2.9)	3.9	(3.2–4.9)

Source: Youth Risk Behavior System Report

Risk Factors and Special Populations

Risk and protective factors and their interactions form the empirical base for suicide prevention. Variations in suicide rates between age, sex, ethnicity, and culture provide opportunities to understand the different factors that affect these groups and indicate the need for different strategies to meet the needs of different populations.[6] Risk factors involve neurobiological, psychological, social, and cultural characteristics, genetic predisposition, and environmental factors.[7]

No single factor has gained acceptance as a universal cause of suicide. Some risk factors associated with a higher incidence of suicide include, but are not limited to, depression, mental illness, schizophrenia, drug and/or chemical dependency, conduct disorders (in adolescence) and chronic disease. Research findings from the American Association of Suicidology indicate that individuals with mental health diagnoses are generally at greater risk for suicide. Psychological autopsy studies reflect that more than 90 percent of people who committed suicide had one or more mental health disorders, including substance abuse.[5]

Other risk factors can be present in different levels of a person's life. Unhealthy relationships involving high conflict or violence and a family history of suicide can be influential. A community that offers few mental health resources or struggles with barriers to health care, such as lack of access to providers or medications, can put individuals at greater risk. Additionally, availability of lethal means of suicide and sensationalized media portrayals of suicide are risk factors at the societal level.[7]

Adults

Major depression is the psychiatric diagnosis most commonly associated with suicide. Lifetime risk of suicide among patients with untreated depressive disorder is nearly 20 percent, and about two-thirds of people who commit suicide are depressed at the time of their death.[18] The risk of suicide in people with major depression is about 20 times that of the general population. The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest, on-going telephone health survey system, tracking health conditions and risk behaviors for individuals 18 years and older in the U.S. The BRFSS has been conducted annually since 1984. The 2010 Indiana BRFSS Anxiety and Depression module showed that 14.9 percent of Hoosiers felt down, depressed or hopeless for one to three days in the past two weeks, 11.6 percent felt that way for three or more days, and 3.4 percent felt that way every day. However, the majority (70.1 percent) indicated that they did not feel down, depressed, or hopeless in the past two weeks.[19]

When asked "Over the last two weeks, how many days have you felt bad about yourself or that you were a failure or had let yourself or your family down?", 9.1 percent reported between one to three days, 7.2 percent reported three or more days, and 3.7 percent reported every day, while 80.0 percent reported they did not feel bad about themselves. Of the surveyed population, 13.5 percent indicated that a doctor/healthcare provider told them they had an anxiety disorder, which includes acute stress disorder, anxiety, generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, phobia, post-traumatic stress disorder, or social anxiety disorder, and 18.2 percent had a doctor/healthcare provider tell them they had a depressive disorder, which includes depression (major or minor) and dysthymia[19]

According to the 2010 Indiana BRFSS, 35.3 percent of individuals reported poor mental health, meaning they identified themselves as having stress, depression, and/or problems with emotions, for at least one day in the past 30 days. Females (39.6 percent) reported having more days of poor mental health than males (35.3 percent). Thirty-five percent of white respondents said they experienced poor mental health, 38.6 percent of Non-Hispanic black respondents reported as such, and 34.2 percent of Hispanic respondents reported poor mental health. Of respondents, 5.4 percent (4.5 percent of males and 6.2 of percent females) said they experienced poor mental health every day.[19] Older adults are particularly vulnerable to depression. Of those surveyed, 43.2 percent ages 65 years and older reported having poor mental health at least one day in the past 30 days, which is one of the leading contributors to death by suicide among that population.[5,19]

Alcohol dependence is a risk factor for suicidal behavior and acute alcohol use is also associated with suicide. Alcohol intoxication can increase suicide risk up to 90 times compared to alcohol abstinence. [20] According to the 2010 Indiana BRFSS, 18.6 percent of males reported having five or more drinks on one occasion in the past 30 days and 8.8 percent of females reported that they had four or more drinks in the same time period, which is known as binge drinking. Also, 4.9 percent of males reported heavy alcohol consumption (more than two drinks per day), and 2.9 percent of females reported heavy alcohol use.

Other risk factors for suicide include being socially isolated, divorced, separated, or widowed or suffering from a physical illness.[5] When asked how often respondents get the social and emotional support they need, 51.6 percent responded “always”, 28.4 percent responded “usually”, 12.2 percent responded “sometimes”, 3.3 percent responded “rarely”, and 4.6 percent said “never”. The elderly are especially susceptible to depression due to changes in physical health and loss of friends and/or spouse. Of those ages 65–74 years, 16.0 percent did not have good physical health one to six days in the previous month, 11.8 percent did not have good physical health 7–29 days of the previous month, and 8.4 percent did not have good physical health every day. Statistics were slightly higher for those 75 years and older (16.1 percent, 16.4 percent and 11.5 percent, respectively). Of adults 65–74 years, 16.2 percent reported their general health as fair and 6.6 percent reported it as poor. Twenty-three percent of adults over 75 years of age reported their general health as fair and 9.5 percent reported it as poor.[19]

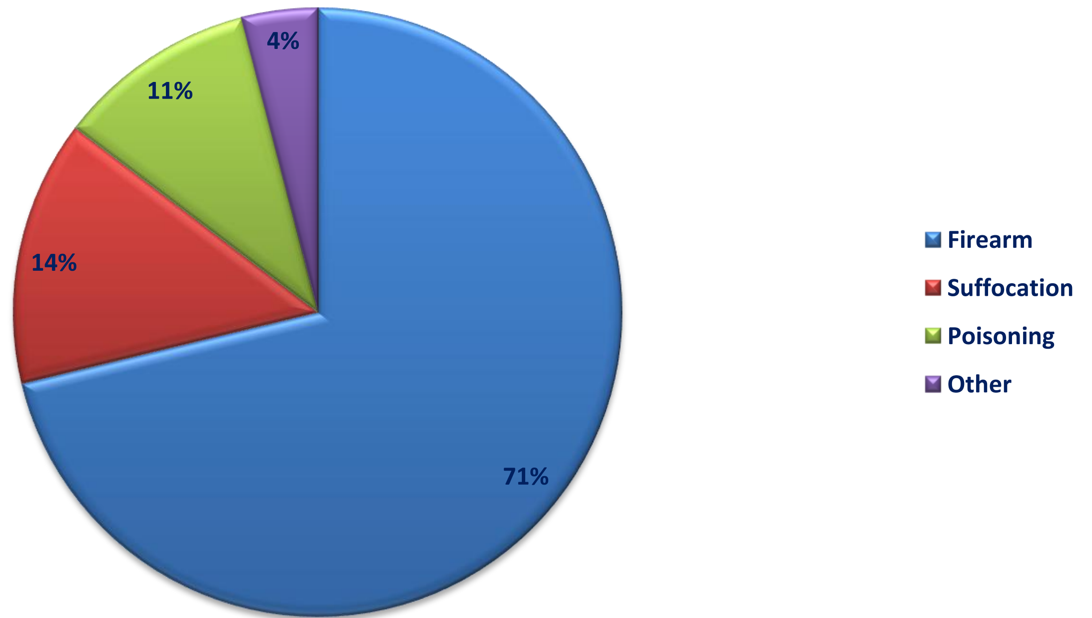
Military Veterans

Military services members, especially those recently returned from combat, experience stress-related conditions that can present challenges to members and their families. Many are exposed for prolonged periods of time to combat-related stress or traumatic events. Indiana has a high number of deployed service members, and most are deployed to front lines. A comprehensive study conducted found that an estimated 18.5 percent of military service members who have returned from deployment report symptoms consistent with a diagnosis of post-traumatic stress disorder (PTSD) or depression.[21] Recently, the Veterans Affairs strengthened mental health services for veterans by establishing new resources and improving access to care for those dealing with post-war stressors.[22]

From 2007 to 2011, 751 suicides were reported among veterans (identified as such by death certificates) in Indiana, of which 71.2 percent died by firearm, 14.1 percent by suffocation, 10.7 percent by poisoning, and 4.0 percent by other methods (Figure 19). Males accounted for 98.1 percent (737) of veteran suicides and the largest number of suicides occurred among those age 60-65 years (Figure 20). The number of veteran suicides per Indiana county is displayed in Figure 21.

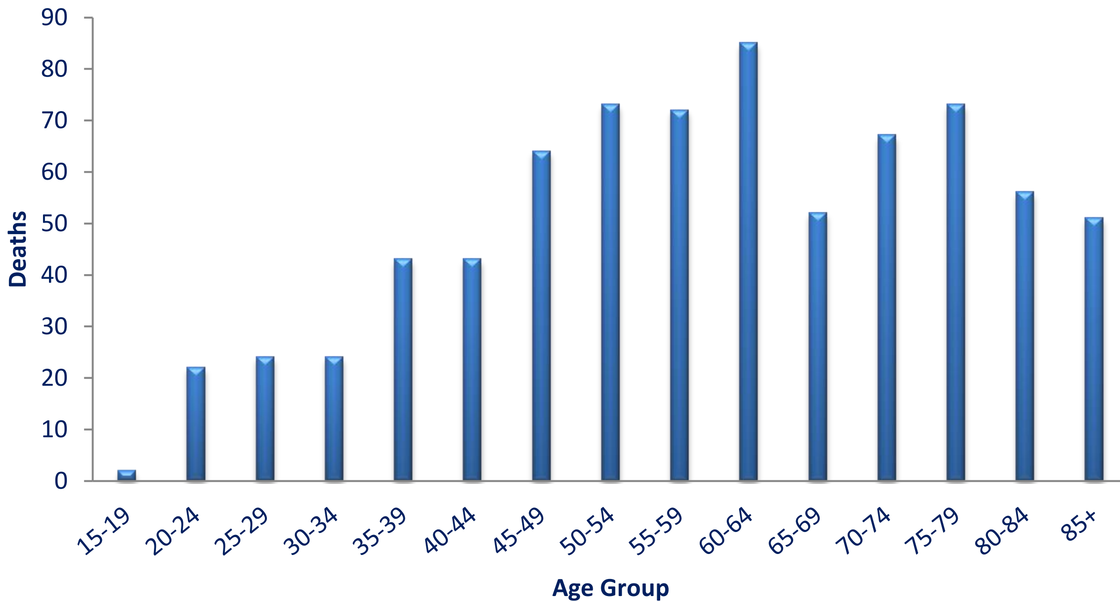
BRFSS results from 2010 reflect this increase in mental health needs among recently returned veterans.[23] Indiana, with 11 other states had 2010 BRFSS mental health results by military status. When asked, “Over the last two weeks, how many days have you felt down, depressed or hopeless,” 4.9 percent of respondents who were on active duty during the last 12 months, but not at the time of the survey, said “every day.” Of those who had never served in the military, 3.3 percent said they felt this way every day during the last two weeks. Of the surveyed population, 17.1 percent of those on active duty during the last 12 months, but not at the time of the survey, said that over the last two weeks they had trouble falling asleep or staying awake or sleeping too much every day, compared to 10.9 percent of those who had never served.[21]

Figure 19. Veteran* suicide by mechanism, Indiana, 2007–2011



Source: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis
*Veteran as reported on the death certificate

Figure 20. Veteran* suicide by age group, Indiana, 2007–2011



Source: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis
*Veteran as reported on the death certificate

Figure 21. Veteran* suicides by county of residence, Indiana, 2007–2011

Source: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis
*Veteran as reported on the death certificate
**The number of suicide deaths was less than 5 and is suppressed to protect confidentiality.

Youth

Youth risk factors for suicide include family history of suicide, suicide attempt, or mental illness; male gender; history of physical or sexual abuse; personal mental health problems; and gay or bisexual orientation. Feelings of hopelessness are also found to be predictive of suicide.[5] The 2011 Indiana YRBS indicates that 29.1 percent of high school students reported feeling sad or hopeless almost every day for two or more consecutive weeks so that they stopped doing usual activities during the 12 months before the survey (Table 15).[4] A prior suicide attempt is also a risk factor for eventual suicide completion.[24] According to the YRBS, 11.0 percent of Indiana high school students reported that they attempted suicide in the previous 12 months, ranking 2nd among the 43 states surveyed.[4] Nineteen percent (1st among surveyed states) of Hoosiers in grades 9–12 seriously considered attempting suicide during the past 12 months, and approximately 13.6 percent (7th among surveyed schools) of students had a plan for how they would attempt suicide (Table 15).[4]

Additionally, when controlling for sex, race/ethnicity, and grade in school, student academic performance was significantly associated with suicide risk behaviors. Among students who received mostly A's, 12.7 percent seriously considered attempting suicide during the past 12 months, compared to 30.1 percent of students who received mostly D's and F's. Among students who received mostly A's, 9.0 percent made a plan about how they would attempt suicide during the past 12 months, compared to 22.6 percent of students who received mostly D's and F's. Among students who received mostly A's, 5.4 percent attempted suicide one or more times during the past 12 months, compared to 24.5 percent of students who received mostly D's and F's.[4]

Protective Factors

Protective factors play an important role in understanding and preventing suicide. Protective factors include an individual's coping and problem solving skills, reasons for living (e.g., children in the home), and moral/religious objections to suicide. A person's relationships, such as connectedness to individuals, family, community and social institutions, and supportive relationships with health care providers contribute to mental health status. Safe and supportive school and community environments and sources of continued care after psychiatric hospitalization are community-level protective factors. Society plays a vital role in protecting individuals from suicide, including availability of physical and mental health care and restrictions to lethal means of suicide.[7] Understanding the measures or factors that safeguard against suicide is essential to preventing suicide, yet they may not entirely remove the risk.

Prevention Strategies

The public health approach (Figure 22) is an ideal method to address suicide prevention. The first two steps, defining the burden of suicide in Indiana and identifying risk and protective factors for suicide and suicide attempts, have been addressed in this report. The next steps

include developing, implementing, and evaluating prevention strategies that are informed by data. The Indiana Suicide Advisory Committee released the Suicide State Prevention Plan to serve as a call to action for the state of Indiana, including individuals and communities, schools, community partnerships and task forces, employers and health providers.[25] Sections of the plan include information for each level of action: awareness, prevention, intervention, postvention (appropriate and effective community response after a suicide), and evaluation. Suicide prevention partners in the community can move from utilizing data from this report to developing action plans using strategic planning, goal setting, and assessing community readiness and needs.

Figure 22. Public health approach to suicide prevention

Suicide Prevention Resource Center (SPRC) Best Practices Registry

The best practices registry can be utilized to identify, review and disseminate information about best practices for suicide prevention that address specific objectives of the National Strategy for Suicide Prevention. The three sections of the registry listed below provide different types of programs and practices reviewed according to specific criteria.

- Section I: Evidence-Based Programs: Programs are effective, although their effectiveness may not hold true for all audiences or settings.
- Section II: Expert and Consensus Statements
- Section III: Adherence to Standards

This registry can be can be accessed at: http://www.sprc.org/bpr/section-i-evidence-based-programs#sec1listings.

Conclusion

Suicide remains a serious public health issue for the nation and for Indiana. Suicide took the lives of 867 Hoosiers at a rate of 13.1 per 100,000 population in 2010, making suicide the 11th leading cause of death.[1] Suicide was the second leading cause of death in the 15–34 age group and the third leading cause of death among those ages 10–14 years.[1] As with other public health issues, efforts to reduce suicide require multiple strategies at national, state, and community levels. The objective of this report was to take the initial step of the public health approach: to define the problem, both in the U.S. and in Indiana, and help community leaders begin to identify the causes of suicide, develop and implement interventions, and ultimately evaluate the interventions.

Suicide Prevention Organizations and Websites

Many local, state and national organizations exist to help with suicide awareness and intervention. A number of tools can be used to assess the risk factors and protective factors in a community to determine the potential for suicide and opportunities for prevention. Such tools include questionnaires that are readily available to mental health professionals, counselors, and health care providers. An example of a community assessment tool is available at http://www.sprc.org/library/catool.pdf. The availability of crisis intervention services, hotlines, and easy access to mental health providers can impact the problem of suicide in Indiana. Training and sessions on suicide awareness are also effective. All communities should become aware of what can be accomplished to prevent suicide in their locale.

Indiana Organizations and Websites

American Foundation for Suicide Prevention (AFSP)—Indiana Chapter
https://www.afsp.org/local-chapters/find-your-local-chapter/afsp-indiana/about-our-chapter
P.O. Box 1793
Noblesville, IN 46061
Contact: Lisa Brattain, Indiana Chapter Chair
Phone: (317) 774-1377
Fax: (317) 774-1377

The American Foundation for Suicide Prevention (AFSP) is the leading national not-for-profit organization exclusively dedicated to understanding and preventing suicide through research, education and advocacy, and to reaching out to people with mental disorders and those impacted by suicide. The Indiana Chapter is dedicated to serving the AFSP mission.

Indiana State Department of Health
http://www.in.gov/isdh/19537.htm
Division of Trauma and Injury Prevention
2 North Meridian Street
Indianapolis, IN 46204
Program contact: Brian Carnes (bcarnes@isdh.in.gov)
Phone: (317) 234-6325
Fax: (317) 233-7761

The Division of Trauma and Injury Prevention disseminates descriptive statistical information to those entities throughout the state having an interest in suicide and preventive control strategies. The program's goal is to develop a functional surveillance system for all injuries and establish a core injury team for the state.

Indiana Youth Group
http://indianayouthgroup.org/

2943 E. 46th St.
Indianapolis, IN 46205
Phone: (317) 541-8726
Fax: (317) 545-8594

Indiana Youth Group (IYG) provides safe places and confidential environments where self-identified lesbian, gay, bisexual, transgender, and questioning youth are empowered through programs, support services, social and leadership opportunities and community service. IYG advocates on their behalf in schools, in the community and through family support services.

Mental Health America of Indiana
www.mentalhealthassociation.com
http://www.mhai.net/map_index.htm (Contact information for county-level organizations)
1431 North Delaware Street
Indianapolis, IN 46202
Phone: (317) 638-3501 or (800) 555-MHAI (6424)
Fax: (317) 638-3540

The Mental Health Association focuses on mental health issues in Indiana and works for victory over mental illness through education, advocacy, and direct services such as support groups. As of September 2007, 52 counties have county-level mental health organizations.

Mental Health America of Greater Indianapolis
Crisis and Suicide Intervention Services
www.mhaindy.net
2506 Willowbrook Pkwy, Suite 100
Indianapolis, IN 46205
Phone: (317) 251-7575 (24-hour Crisis Line) or (317) 251-0005
Fax: (317) 254-2800

Mental Health America of Greater Indianapolis offers a 24-hour telephone information and referral service for suicide prevention, family violence, depression, and a wide range of other issues. Their services are confidential and free. The Crisis and Suicide Intervention Service also offers training for community agencies, educational presentations to schools, churches, and civic groups, and phone consultation with concerned family members and friends.

Survivors of Suicide Support Groups
http://www.suicideaftercare.org/indiana.html

Support groups for survivors (friends and family left behind after a suicide) exist across Indiana. The support groups also advocate for education and prevention of suicide. Check website for nearest location

National Organizations and Websites

Suicide-Specific Organizations

American Association of Suicidology (AAS)
www.suicidology.org
5221 Wisconsin Avenue, NW
Washington, DC 20015
Phone: (202) 237-2280
Fax: (202) 237-2282

The American Association of Suicidology is dedicated to understanding and preventing suicide. AAS promotes research, public awareness programs, education and training for professionals and volunteers, and serves as a national clearinghouse for information on suicide. Suicide grief support brochures: "Survivors of Suicide, Coping with the Suicide of a Loved One" are available.

American Foundation for Suicide Prevention (AFSP)
www.afsp.org
120 Wall Street, 22nd Floor
New York, New York 10005
Phone: (888) 333-AFSP or (212) 363-3500
Fax: (212) 363-6237

The American Foundation for Suicide Prevention funds research, education, and treatment aimed at the prevention of suicide and the understanding of depression. AFSP maintains a national directory of survivor support groups. The website also has recommendations for the media about responsible reporting on suicide.

Suicide Prevention Action Network USA, Inc. (SPAN)
http://www.afsp.org/advocacy-public-policy/become-an-advocate/suicide-prevention-advocacy-network
5034 Odin's Way
Marietta, GA 30068
(888) 649-1366
770) 642-1419 (fax)

SPAN, a nonprofit organization is dedicated to the creation of a national suicide prevention strategy. SPAN links the energy of those bereaved by suicide with the expertise of leaders in science, business, government, and public service to achieve the goal of significantly reducing the national rate of suicide by the year 2010.

Suicide Prevention Resource Center (SPRC)
www.sprc.org
Education Development Center, Inc.
55 Chapel Street
Newton, MA 02458-1060
Phone: (617) 964-5448 or (877) 438-7772

The Suicide Prevention Resource Center is a national resource center that provides technical assistance, training and information in order to strengthen suicide prevention networks and advance the National Strategy for Suicide Prevention. The center provides suicide prevention technical assistance to national, state, and local organizations, disseminates suicide prevention related information, identifies best practices in suicide prevention, develops and delivers training on suicide prevention topics, and conducts policy activities. SPRC maintains an on-line library with extensive information and a registry of best practices which is a helpful resource.

Centre for Suicide Information
http://suicideinfo.ca/
Suite 320, 1202 Centre Street S.E.
Calgary, AB T2G 5A5
Phone: (403) 245-3900
Fax: (403) 245-0299

Centre for Suicide Information is a Canadian organization which maintains a resource library with extensive information on suicide prevention, post intervention, and intervention efforts and trends, and provides information to develop successful suicide prevention, intervention, and post intervention programs, including statistics, resource people, computer literature searches, and document delivery.

Light for Life Foundation International
Yellow Ribbon Suicide Prevention Program
www.yellowribbon.org
P.O. Box 644
Westminster, CO 80036-0644
Phone: (303) 429-3530
Fax: (303) 426-4496

The Yellow Ribbon Suicide Prevention Program provides information on suicide, survivors support groups, and task forces and coalitions around the country. They also provide seminars and presentation that teach awareness and suicide prevention skills with chapters around the country to provide support and services to prevent suicide.

Livingworks
http://www.livingworks.net/
P.O. Box 9607
Fayetteville, NC 28311
Phone: (910) 867-8822
Fax: (910) 867-8832

The Livingworks Program is a comprehensive, coordinated and integrated approach to preventing suicide that involves the entire community. Livingworks Program is best known for distributing the ASIST Training (Applied Suicide Intervention Skills Training). The ASIST Training has been refined for over 23 years with feedback from over 500,000 participants and 3,000 active trainers.

National Alliance on Mental Illness (NAMI)
www.nami.org
Colonial Place Three
2107 Wilson Blvd., Suite 300
Arlington, VA 22201-3042
Phone: (703) 524-7600
Fax: (703) 524-9094

The National Alliance on Mental Illness is the nation's largest grassroots mental health organization dedicated to improving the lives of persons living with serious mental illness and their families. Founded in 1979, NAMI has become the nation's voice on mental illness, a national organization including NAMI organizations in every state and over 1,100 local communities across the country who join together to meet the NAMI mission through advocacy, research, support, and education.

National Center for Suicide Prevention Training
EDC/Harvard School of Public Health
www.ncspt.org
55 Chapel Street
Newton, MA 02458-0160
Phone: (617) 964-5448 or (877) 438-7772
Fax: (617) 969-9186

The National Center for Suicide Prevention Training helps with development of suicide prevention training websites for professionals. The Center's website provides internet- based workshops on the following topics: using data to educate the public and policy makers about youth suicide, youth suicide prevention planning and evaluation and youth suicide prevention gatekeeper training. In addition, the website provides on-line resources and archives of the materials and discussions generated during the facilitated workshops.

National Organization for People of Color Against Suicide
www.nopcas.org
4715 Sargent Road, NE
Washington, DC 20017
Phone: (202) 549-6039 or (866) 899-5317

The National Organization for People of Color Against Suicide is a national organization that focuses on helping minority suicide survivors.

National Suicide Prevention Lifeline
http://www.suicidepreventionlifeline.org/
Phone: (800) 273-TALK (8255)

The National Suicide Prevention Lifeline is a network of 24-hour crisis centers with a toll-free suicide prevention service available to anyone in suicidal crisis. Calls originating anywhere in the United States will be routed to the nearest available crisis centers. This call-routing is based on crisis center call capacity and availability. With over 120 crisis centers across the country, the national suicide prevention lifeline's mission is to provide immediate assistance to anyone seeking mental health services.

QPR Institute
www.qprinstitute.com
P.O. Box 2867
Spokane, WA 99220
Phone: (888) 726-7926 or (509) 536-5100
Fax: (509) 536-5400

QPR is a simple educational program that teaches citizens how to recognize a mental health emergency and how to get a person at risk the help they need. QPR stands for Question, Persuade, and Refer which are the three simple steps that anyone can learn to help save a life from suicide.

Screening for Mental Health (SOS Suicide Prevention Program)
www.mentalhealthscreening.org/schools/index.aspx
One Washington Street, Suite 304
Wellesley Hills, MA 02481
Phone: (781) 239-0071
Fax: (781) 431-7447

Screening for Mental Health has a suicide prevention program called the SOS Signs of Suicide Prevention Program. The training is a nationally recognized program for secondary school students. It is the only school-based program to show a reduction in suicide attempts (by 40%) in a randomized controlled study (American Journal of Public Health, March, 2004).

Stop a Suicide Today
http://www.stopasuicide.org/

Stop a Suicide Today can teach how to recognize the warning signs of suicide in family, friends, co-workers, and patients, and why one needs to respond as with any medical emergency. The program emphasizes the relationship between suicide and mental illness and the notion that a key step in reducing suicide is to get those in need into mental health treatment.

Suicide Awareness Voice of Education (SAVE)
www.save.org
9001 E. Bloomington Fwy, Ste 150
Bloomington, MN 55420
National Hotline (800) 273-TALK (800-273-8255)
Phone: (952) 946-7998

Suicide Awareness Voice of Education's mission is to educate the public about suicide prevention and to speak for suicide survivors. SAVE is a public awareness campaign funded by grant from Minnesota Department of Public Health, "Depression: Treat It As If Your Life Depended On It."

Youth Suicide Prevention School-based Guide
http://theguide.fmhi.usf.edu/
Contact: Stephen Roggenbaum
Louis de la Parte Florida Mental Health Institute (FMHI)
The University of South Florida
13301 Bruce B. Downs Blvd., MHC-2405
Tampa, FL 33612-3899
Phone: (813) 974-6149
Fax: (813) 974-7376

The Guide is not a program but a tool that provides a framework for schools to assess their existing or proposed suicide prevention efforts (through a series of checklists) and provides resources and information that school administrators can use to enhance or add to their existing program.

Related Organizations

American Academy of Child and Adolescent Psychiatry (AACAP)
www.aacap.org
3615 Wisconsin Avenue, NW
Washington D.C. 20016
Phone: (202) 966-7300
Fax: (202) 966-2891

The American Academy of Child and Adolescent Psychiatry promotes an understanding of mental illnesses and removing the stigma associated with them advancing efforts in prevention of mental illnesses, and assuring proper treatment and access to services for children and adolescents.

American Academy of Pediatrics (AAP)
www.aap.org
141 Northwest Point Boulevard
Elk Grove Village, Illinois 60007-1098
Phone: (847) 434-4000
Fax: (847) 434-8000

The American Academy of Pediatrics comprises 55,000 primary care pediatricians, pediatric medical specialist, and pediatric surgical specialists. AAP provides information on child health, advocacy, and safety and has a family-oriented publication, including one on adolescent development and suicide, and an on-line bookstore.

American Psychiatric Association
www.psych.org
1000 Wilson Boulevard, Suite 1825
Arlington, VA 22209-3901
Phone: (707) 907-7300
Email: apa@psych.org

The American Psychiatric Association is the world's largest psychiatric organization representing over 38,000 psychiatric physicians from the U.S. and around the globe. The website has links to legislative issues affecting psychiatrists and patients, information on how to prepare for and respond to disasters and trauma, and links to psychiatric-related literature. APA also offers grants and fellowships.

American Psychological Association (APA)
www.apa.org
750 First Street, NE
Washington, DC 20002
Phone: (202) 336-5500 or (800) 374-2721
Fax: (202) 336-5568

The American Psychological Association is the largest scientific and professional organization representing psychology in the U.S. and the world's largest association of psychologists. APA works to advance psychology as a science, as a profession, and as a means of promoting human welfare. PsychINFO is an electronic database of abstracts on over 1,350 scholarly journals.

Centers for Disease Control and Prevention (CDC)
National Center for Injury Prevention and Control (NCIPC)
www.cdc.gov/ncipc
Mailstop MS K-65
4770 Buford Highway, NE
Atlanta, GA 30341-3717
Phone: (800) CDC-INFO (232-4636)
FAX: (770) 488-4760

The National Center for Injury Prevention and Control is the lead federal agency for injury prevention. NCIPC works closely with other federal agencies, national, state, and local organizations, health departments, and research institutions and focuses on science-based prevention strategies to reduce injuries and deaths due to interpersonal violence and suicidal behavior.

Center for School Mental Health Assistance
http://csmh.umaryland.edu/
University of Maryland at Baltimore
Department of Psychiatry
737 West Lombard St., 4th Floor
Baltimore, MD. 21201-1570
Phone: (888) 706-0980 or (410) 706-0980
Fax: (410) 706-0984

The Center for School Mental Health Assistance provides leadership and technical assistance to advance effective interdisciplinary school-based mental health programs. The Center offers a forum for training, the exchange of ideas, and promotion of coordinated systems of care that provide a full continuum of services to enhance mental health, development and learning in youth.

Children's Safety Network (CSN)
http://www.childrenssafetynetwork.org/
55 Chapel Street
Newton, MA 02458-1060
Phone: (800) 225-4276
Fax: (617) 527-4096
Email: infot@hhd.org

The Children's Safety Network assists states, communities, and others to prevent child and adolescent injuries. CSN provides information, training, and technical assistance to facilitate the development of new injury and violence prevention programs and enhance and support existing efforts.

Depression and Bipolar Support Alliance
http://www.dbsalliance.org/
730 N. Franklin Street, Suite 501
Chicago, Illinois 60610-7204
Phone: (800) 826-3632
Fax: (312) 642-7243

The Depression and Bipolar Support Alliance provides hope, help, support, and education to improve the lives of people who have mood disorders. DBSA works to create the opportunity for meaningful lives by compassionately engaging with individuals and providing peer-led support groups, educational materials, and wellness tools that focus on resiliency, achievement, creativity and connection.

The Gay, Lesbian and Straight Education Network (GLSN)
www.glsen.org
90 Broad Street, 2nd Floor
New York, NY 10004
Phone: (212) 727-0135
Fax: (212) 727-0254

The Gay, Lesbian, and Straight Education Network strives to assure that each member of every school community is valued and respected, regardless of sexual orientation, by teaching the lesson of respect for all in public, private, and parochial K-12 schools. Founded as a small volunteer group in Boston in 1990, GLSEN led the fight that made Massachusetts the first state to ban discrimination against gay and lesbian students in public school in 1993.

Mental Help Net
www.mentalhelp.net
570 Metro Place North
Dublin, OH 43017

Phone: (614) 764-0143
Fax: (614) 764-0362

The Mental Help Net provides a comprehensive source of on-line mental health information, news and resources.

Join Together
http://www.drugfree.org/join-together
One Appleton Street 4th floor
Boston, MA 02116
Phone: (617) 437-1500
Fax: (617) 437-9394

Join Together is a national resource for communities fighting substance abuse and gun violence. Join Together Online provides up to-date news and information and is a project of the Boston University School of Public Health.

Mental Health America
www.nmha.org
2000 N. Beauregard Street, 6th Floor
Alexandria, VA 22311
Phone: (703) 684-7722 or (800) 969-6642
Fax: (703) 684-5968

Mental Health America (formerly known as the National Mental Health Association) provides referrals for mental health services to the public, local mental health associations, corporations and other mental health organizations. The Association's website has a link to depression screening tools for teens at www.depressionscreening.org. Please note that this depression screening is not intended to diagnose clinical depression but may help to identify symptoms for further evaluation.

National Association of School Psychologists
National Mental Health and Education Center
www.nasponline.org
4340 East West Highway Suite 402
Bethesda MD 20814
Phone: (301) 657-0270 or (866) 331-NASP
Fax: (301) 657-0275

The National Mental Health and Education Center promotes educationally and psychologically healthy environments for all children and youth by implementing research-based effective programs that prevent problems, enhance independence, and promote optimal learning. Their website has resources on mental illness, including depression and suicide.

National Institute of Mental Health (NIMH)
http://www.nimh.nih.gov/index.shtml
6001 Executive Boulevard
Rm. 8184 MSC 9663
Bethesda, MD 20892-9663
Phone: (301) 443-4513 or (866) 615-6464
Fax: (301) 443-4279

The National Institute of Mental Health Suicide Research Consortium coordinates program development in suicide research across the Institute, identifies gaps in the scientific knowledge base on suicide across the life span, stimulates and monitors extramural research on suicide, keeps abreast of scientific developments in suicidology and public policy issues related to suicide surveillance, prevention and treatment, and disseminates science-based information on suicidology to the public, media, and policy makers .

National Mental Health Information Center
http://healthfinder.gov/orgs/HR2480.htm
P.O. Box 42557
Washington, D.C. 20015
Phone: (800) 789-2647
Fax: (240) 221-4295

The National Mental Health Information Center provides a user-friendly, "one stop" gateway to a wide range of resources on mental health services. The National Mental Health Information Center was developed for users of mental health services and their families, the general public, policy makers, providers, and the media. Information Center staff members are skilled at listening and responding to questions from the public and professionals. The staff quickly directs callers to federal, state, and local organizations dedicated to treating and preventing mental illness. The Information Center also has information on federal grants, conferences, and other events.

Office of the Surgeon General
www.surgeongeneral.gov
5600 Fishers Lane
Room 18-66
Rockville, MD 20857
Phone: 301-443-4000
Fax: 301-443-3574

The Surgeon General's Office has issued The Surgeon General's Call to Action to Prevent Suicide and accompanying fact sheets. Additional information on the Healthy People 2010 Objectives is available from the Office and through the website.

Striving to Reduce Youth Violence Everywhere (STRYVE)
http://www.vetoviolence.org/stryve/
P.O. BOX 10809
Rockville, MD 20849-0809
Phone: (866) 723-3968 or (866) SAFEYOUTH
Fax: (301) 562-1001

STRYVE, or Striving to Reduce Youth Violence Everywhere, is a national initiative led by the Centers for Disease Control and Prevention (CDC) to prevent youth violence before it starts among young people ages 10 to 24. STRYVE's vision is safe and healthy youth who can achieve their full potential as connected and contributing members of thriving, violence-free families, schools, and communities

Substance Abuse and Mental Health Services Administration (SAMHSA)
www.samhsa.gov
5600 Fishers Lane, Rm. 12-105
Rockville, MD 20857
Phone: (301) 443-4795
Fax: (301) 443-0284

The Substance Abuse and Mental Health Services Administration is a federal agency charged with improving the quality and availability of prevention, treatment, and rehabilitation services in order to reduce illness, death, disability, and cost to society resulting from substance abuse and mental illnesses.

Disclaimer: The sites listed here have been identified based on their relevance to intentional injury prevention. Views expressed on the web sites are not necessarily those of the Indiana State Department of Health.

The organizations list was partially adapted and modified from the summary produced by the Injury Prevention and Control Program of Massachusetts Department of Public Health.

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