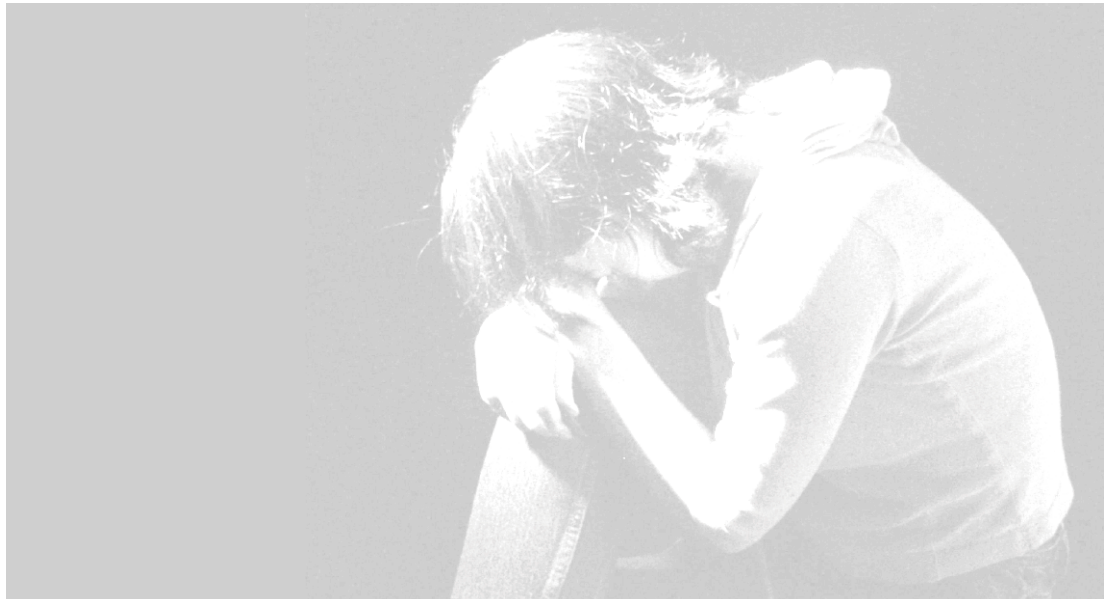


OREGON DEPARTMENT OF HUMAN SERVICES

Injury Prevention and Epidemiology Program



Youth Suicide Attempts in Oregon

Adolescent Suicide Attempt Data System

2006 Data Report

Data for this report were compiled from a number of published and unpublished Oregon Department of Human Services sources.

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Oregon Department of Human Services

Public Health Division

Injury Prevention and Epidemiology

<http://www.oregon.gov/DHS/ph/ipe/index.shtml>

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EXECUTIVE SUMMARY

Overview

Suicide is a public health problem in Oregon, and suicide risk increases considerably in the teen years. The Oregon Injury Prevention and Epidemiology Program uses a public health approach to suicide prevention—an approach that addresses suicide prevention primarily at the community level. Part of the public health approach to suicide prevention involves assessing occurrences of suicide attempts. Understanding when suicide attempts happen, how often, when, and to whom all help in directing efforts aimed at reducing the frequency of attempts among Oregon youth. The Adolescent Suicide Data System (ASADS) was established by the Oregon legislature to monitor youth suicide attempts, where youth present for treatment at a hospital. ASADS provides information that helps:

- Estimate the frequency of suicide attempts among Oregon adolescents and monitor possible increases, decreases and trends.
- Monitor factors associated with suicide and suicide attempts among adolescents.
- Increase public awareness.
- Develop programs that support suicide prevention.

Findings

There were 621 suicide attempts among youth under 18 years of age reported through ASADS in 2006. Attempts were more common among female youth compared to males, with about 3 times more attempts reported among females than males. Children as young as 7 years of age were reported, although the majority of attempts occurred among teens 15 and older. The most commonly used means of suicide attempt was pharmaceutical drugs. Most attempts occurred in the youth's own home. About a third of youth had told someone else about their plans to attempt suicide.

Recommendations

Suicide is a serious public health problem, and identifying and tracking suicide attempts is an important step in preventing suicide and reducing the burden of suicide in Oregon communities. However, communities, individuals, government agencies, hospitals and other health care providers must all act to prevent suicide and suicide attempts from ever occurring. Important steps include:

- Reduce harassment in schools and communities

- Enhance crisis services
- Establish and maintain crisis response teams
- Support suicide survivors
- Eliminate the stigma associated with behavioral health care
- Reduce at-risk youth access to lethal means of self-harm
- Recognize and respond appropriately to troubled youth that vocalize plans for suicide
- Improve follow-up care for suicide attempters
- Refer all attempters for follow-up care. Oregon statute requires that all youth presenting to a hospital following a suicide attempt must be referred to in-patient or out-patient community resources, crisis intervention or other appropriate intervention by facility staff
- Improve access to affordable behavioral health care
- Reporting facilities (hospitals) should adhere to the ASADS reporting protocol as detailed by DHS (www.oregon.gov/DHS/ph/ipe/ysp/ASADS2.shtml) to improve the validity and reliability of data. Accurate, timely, and reliable information leads to improved outcomes.

Conclusions

ASADS provides data for public health action to prevent youth suicide. As part of the effort to understand patterns of suicidal behavior in a vulnerable population, ASADS is an integral part of monitoring attempts and outcomes to help reduce the burden of self-harm and suicide in Oregon.

INTRODUCTION

The risk of suicide begins early in the course of life. Among 15-24 year old Oregonians, suicide is the second leading cause of death. Data in recent years have shown that youth as young as 7 years of age are vulnerable to suicidal behavior. In 2006, there were 621 suicide attempts made by Oregon youth, and reported by hospitals throughout the state. This number does not reflect the true magnitude of suicide attempts by Oregon youth, since the Adolescent Suicide Attempt Data System (ASADS), from which data this report is based, collects only data from those attempts where youth subsequently present to hospital emergency rooms.

Both suicide and suicide attempts are preventable. The Oregon Injury Prevention and Epidemiology Program, in conjunction with community partners, set forth a plan to reduce youth suicide in 2001 called *A Call to Action: the Oregon Plan for Youth Suicide Prevention* (<http://www.oregon.gov/DHS/ph/ipe/ysp/2000plan/index.shtml>). This plan outlines an initiative through which Oregonians can help

- Break through denial and cultural taboos about suicide
- End the shame associated with suicide
- Foster the conviction that not even one youth has to die by suicide
- Take responsibility by openly and honestly joining with other Oregonians to reduce suicide among our youth.

The 15 strategies for state and community-based action require a commitment to partnership and shared responsibility among state agencies, between state and local governments, and between public and private sectors. Oregon's plan recognizes that the impact of suicide goes beyond any individual—it impacts whole communities, and public health approaches to preventing injury death focus on communities in ways that address prevention across the population:

- Training school staff to recognize the signs of depression and suicide
- Educating parents, teachers, and students about the risks and prevention of suicide
- Screening and referral to mental health counseling
- Raising community awareness to end the stigma associated with behavioral health care

- Creating and sustaining cross-system referral networks

Part of the public health approach to suicide prevention involves assessing the incidence of suicide attempts. Understanding when suicide attempts happen, when, and to who helps direct efforts to curb the frequency of attempts among Oregon youth.

ASADS was established by the Oregon legislature to monitor youth suicide attempts, where the youth present for treatment at a hospital. In 2008, the Injury Prevention and Epidemiology Program (IPE) assumed operation of ASADS from the state Center for Health Statistics.

ASADS was established in 1987 by Oregon Revised Statute 441.750, mandating that hospitals refer youth who attempt suicide to in-patient or out-patient community resources, crisis intervention or other appropriate intervention by the patient's attending physician, hospital social work staff or other appropriate staff, provide information to patients, and report attempt information to The Department of Human Services. The Injury Prevention and Epidemiology Program within the state Public Health Division uses ASADS data to monitor changes in the patterns of incidence of suicide attempts.

This report describes data collected via ASADS during the 2006 calendar year, for all reported attempts that occurred in 2006, describes the activities of the Oregon Injury Prevention and Epidemiology Program in preventing youth suicide, and concludes with recommendations to prevent youth suicide attempts through a public health approach and strengthen public health infrastructure for suicide prevention.

DATA LIMITATIONS

ASADS is a system that collects data on youth suicide attempts for the purpose of directing population level prevention efforts. Data are collected only for youth ages 17 and younger.

Although collection of data is required by state statute, there is variation in the uniformity of timely and complete reporting among hospitals, so caution must be exercised when comparing the numbers and rates of attempts across time periods. This is especially relevant for county-level data, where variation in reporting practices among a small group of hospitals can lead to substantial variation in the number of suicide attempts reported from year to year.

The ASADS system only captures data on suicide attempts among persons who present to hospitals or hospital emergency rooms. It is not known how many attempts occur among youth in Oregon who are never reported because the person who attempts does not present to a hospital emergency room. As a result, the number reported here should be considered a minimum.

Data include all attempts reported to the ASADS system, possibly including some attempts that resulted in death. Since ASADS data does not include patient names, no patient information was matched with death certificate information to identify attempts that resulted in death. A change in 2008 data collection methods will facilitate identification of attempts that end in death.

Because of data limitations that prevent reliable identification of individuals, it is not known how many persons in the 2006 (and previous years) data set are represented by repeat attempts within the same reporting year.

Reports of suicide attempts may not include all data variables requested (e.g. sex, ethnicity, living situation, etc. not reported). As a result, some tables shown may have missing values for some variables, and table totals may not sum to the total number of attempts reported.

Data are collected by various staff within hospitals, which can also lead to reliability issues with the reported data. Some hospitals collect data at the point of patient presentation, which is recommended. Others report data using coded patient records, sometime after a patient has been seen by medical staff.

Although the ASADS data are helpful for broadly describing occurrences among youth that attempt suicide, there are limitations to the data in comparing risk factors. While these data have a somewhat limited application in providing a profile for youth most at risk, the data can help direct prevention efforts by describing the magnitude of what are generally known risk factors among youth.

For further information regarding suicide attempts in Oregon utilizing different sources of data, refer to the Injury Prevention and Epidemiology Program's website at www.oregon.gov/DHS/ph/ipe/index.shtml.

For information on ASADS reporting protocols, or to download forms, refer to the ASADS website at <http://www.oregon.gov/DHS/ph/ipe/ysp/ASADS2.shtml>.

SUICIDE DEATHS

The rate of teen suicide in Oregon has decreased substantially compared to the rate in 1990 of 14.7 per 100,000 teens. In 2003 the rate dropped below the US rate, a trend which continued through 2005. The number of suicide attempts reported to ASADS from Oregon hospitals has also declined in recent years, however, the decline in the number of attempts is also partly due to a lack of reporting follow-up that occurred in 2005-2006. National mortality data for 2006 were not available at the time of this report.

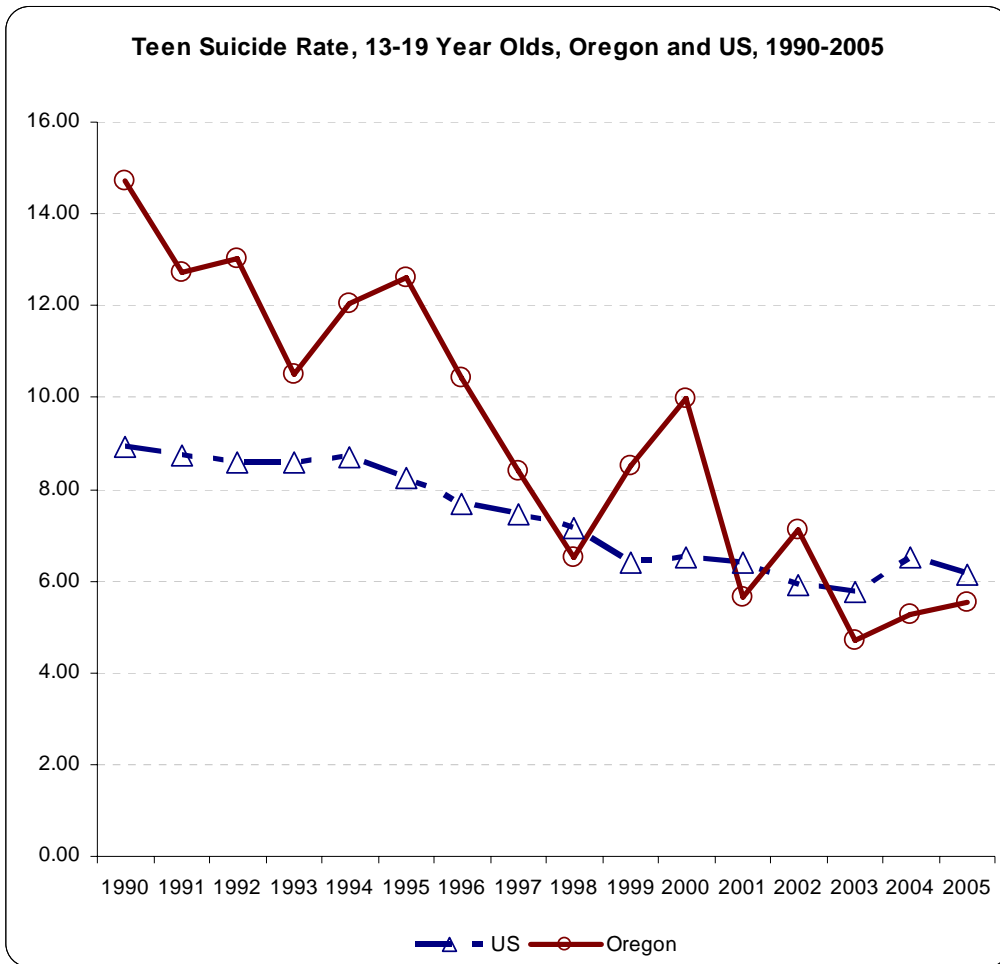


Figure 1. Suicide rate among Oregon and US Teens, 1990-2005.

ATTEMPT DATA

SEX AND AGE

The frequency of reported suicide attempts is higher among girls compared to boys. In 2006, 77% of all reported attempts were among girls. A similar proportion of girls compared to boys was noted in past years.

There are differences in the proportion of girls attempting suicide across

Year	Total	Male	Female
1988	648	110	538
1989	624	120	504
1990	526	118	408
1991	577	124	453
1992	685	141	544
1993	723	113	610
1994	773	187	586
1995	753	150	603
1996	778	163	615
1997	736	151	585
1998	761	190	571
1999	738	180	558
2000	802	178	624
2001	865	202	663
2002	876	221	655
2003	922	207	715
2004	920	209	711
2005	773	188	585
2006	621	142	479

Table 1. Number of Attempts by Year and Sex: 1988-2006

age groups. In 2006, 52% of attempts among children 12 and under were girls, while 83% among 13-14 year old children were girls. Seventy-six percent of attempts among children 15 to 17 were girls. The number of attempts increases dramatically for girls between 14 and 16, while attempts among boys increases more gradually with age.

Although girls are more likely than boys to attempt suicide, boys are more likely to use more lethal means in their attempts. In 2006, the suicide death rate among males 15-24 years of age was 6 times higher than females in the same age group—a trend that generally continues throughout the life course among males.

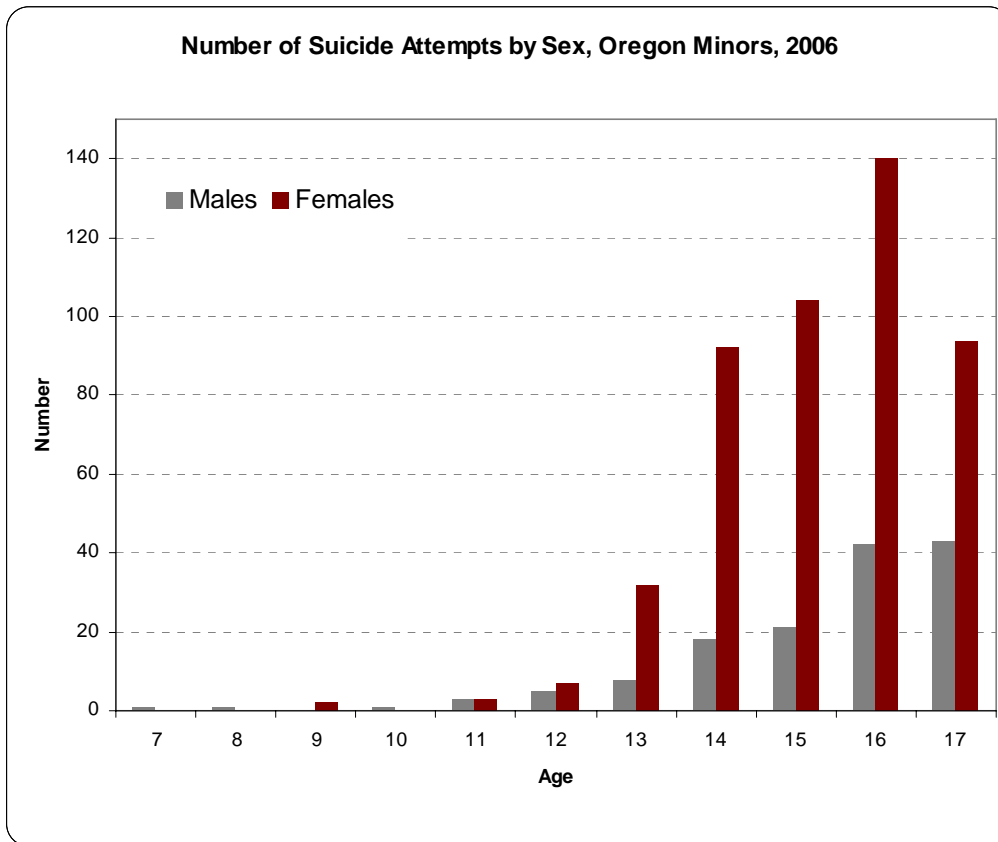
In 2006, there were a total of 23 attempts by pre-teens, which were just under 2% of all attempts reported. There were 11 children under the age of 12 that attempted suicide, the youngest of which was 7 years old.

More than a third—72% of all attempts, were made by those 15 -17 years of age (Table 2). Overall, the largest proportion of reported attempts was among girls 16 years of age.

Table 2. Suicide attempts by age group, 2006.

	Age Group			Total N
	<12	13-14	15-17	
Male	11	25	106	142
Female	12	124	339	475
All	23	149	445	616

Figure 2. Suicide attempts by sex and age group, 2006.



RACE

Ninety-two percent of attempts included race as a reported variable. Ninety-one percent (N=522) of these attempts were among white youth, while 9% reported “other” race. Report forms included a category for both race and Hispanic-origin. Overall, 4% of youth were reported as “Hispanic”. Three percent of white youth were reported as Hispanic, while 18% of “other” race youth were reported as Hispanic on report forms.

Table 3. Suicide attempts by race and ethnicity, 2006.

	Hispanic	Not Hispanic	Unknown	Total
White	15	355	152	522
Black	0	12	2	14
Other	9	27	13	49
Total	24	394	165	585

HOUSEHOLD SITUATION

Of 617 reported attempts with data reported for living situation, 28% reported living with their mother only; 25% reported living with both parents, and 15% reported living with a parent and step parent. Six percent were living at a juvenile facility, 6% reported living with their father alone, and 3% reported living with grandparents. For 11% of reported attempts, the youth's living situation was unknown.

Table 4. Suicide attempts by household situation, sex, and age group, 2006.

	Sex		Age Group			Total
	Male	Female	<=12	13-14	15-17	
	N	N	N	N	N	N
Mother	44	126	7	39	124	170
Both Parents	40	113	4	28	121	153
Parent & Stepparent	21	69	3	27	61	91
Juvenile Facility	7	29	1	10	25	36
Father	7	28	3	11	21	35
Foster Parents	3	19	1	6	15	22
Grandparents	2	18	2	8	10	20
Other Relative	4	5	0	2	7	9
Friends	2	7	0	2	7	9
Aunt	1	2	0	1	2	3
Adoptive Parents	1	2	0	0	3	3
Unknown or Not Stated	10	56	2	15	49	66

The data suggest that there is much variation in the living situations among youth who attempt suicide. It is not clear whether any of the aforementioned categories of living situation are proportionately different from that of youth who do not attempt suicide.

GEOGRAPHIC DISTRIBUTION

The 3-year average rate (2004-2006) of reported youth suicide attempts for minors 10-17 years old in the state overall was 194.1 per 100,000 youth, according to ASADS data. The rate among counties varies substantially, and in many cases, a single year's data cannot be used to calculate the rate due to sparse data. In this case, county-level rates are calculated on a 3-year average as shown in Figure 3 (table inset in map). The rate for some counties is still not reliable when aggregating data because the number of events on which the rate is based is less than 20. As a result, rates based on sparse data must be interpreted with caution, especially when comparing data across years. Incomplete reporting by some hospitals requires caution in interpreting single-year rates for some counties.

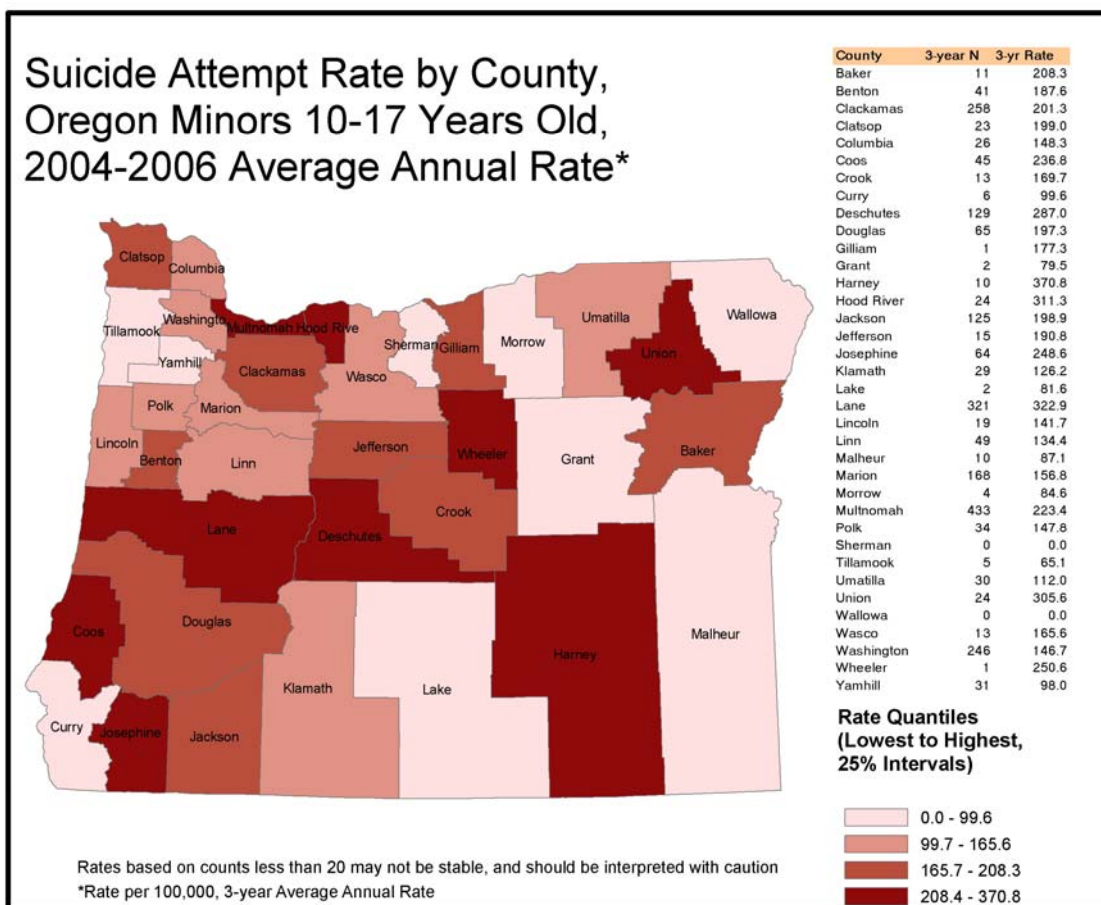


Figure 3. Geographic distribution of youth suicide attempts, 2006.

Most of the attempts reported in 2006 occurred in Lane county (N= 105) followed by Multnomah County (N= 104), and both these counties are within the highest 25% quantile for the 3-year average annual rates, as were Coos, Deschutes, Harney, Hood River, Josephine, Union, Wheeler counties. Seven counties had no reported attempts in 2006: Gilliam, Lake, Lincoln, Morrow, Wallowa, Wasco, and Wheeler. Figure 3 may be as much a reflection of the distribution of health care resources (and access) and reporting compliance as it is a representation of the actual distribution of youth suicide attempts.

PLACE OF ATTEMPT

For 72% of reported attempts, the place of attempt was the youth's own home. Both juvenile facilities and the home of another each accounted for 3% of attempts, while 12% did not report the place of attempt. Slightly more males (78%) than females (72%) were reported as attempting suicide within the home.

Table 5. Place of attempt by sex, 2006.

	Own Home	Another's Home	Foster Home	School	Juvenile Facility	Public Place	Other	Unknown or Not Stated	Total
Male	112	4	0	2	4	1	5	14	142
Female	333	17	11	14	14	4	21	61	475

A child's home is where various mechanism of attempt may be more readily accessible, such as poisons (e.g. pharmaceuticals) and firearms. In many cases, children are aware of the availability of pharmaceutical medicines, and firearms in the home, and many are not prevented from accessing these mechanisms. It is important for parents, providers, and school staff to understand that attempt mechanisms within the home can be hazardous to children that might be at risk for suicide, and to assure, where possible, that these mechanisms are not accessible to children at risk.

TIME OF YEAR

There are two distinct periods during the course of the year when the number of reported attempts increase. Beginning in September, the number of reported attempts increases until a peak in November, declining slightly in December and peaking throughout the winter months until the highest peak in May. From there, attempts decline through the summer months. The fewest attempts occurred August and December. There were twice as many attempts in the month of May alone than there were in August of the same year. This overall pattern is similar among both boys and girls.

The peak periods of attempt risk occur during months when youth are in school attendance, indicating that effective prevention efforts that engage school staff might help reduce the burden of suicide and suicide attempts among Oregon youth. Parents and healthcare provider awareness of risk periods within the year can help address prevention.

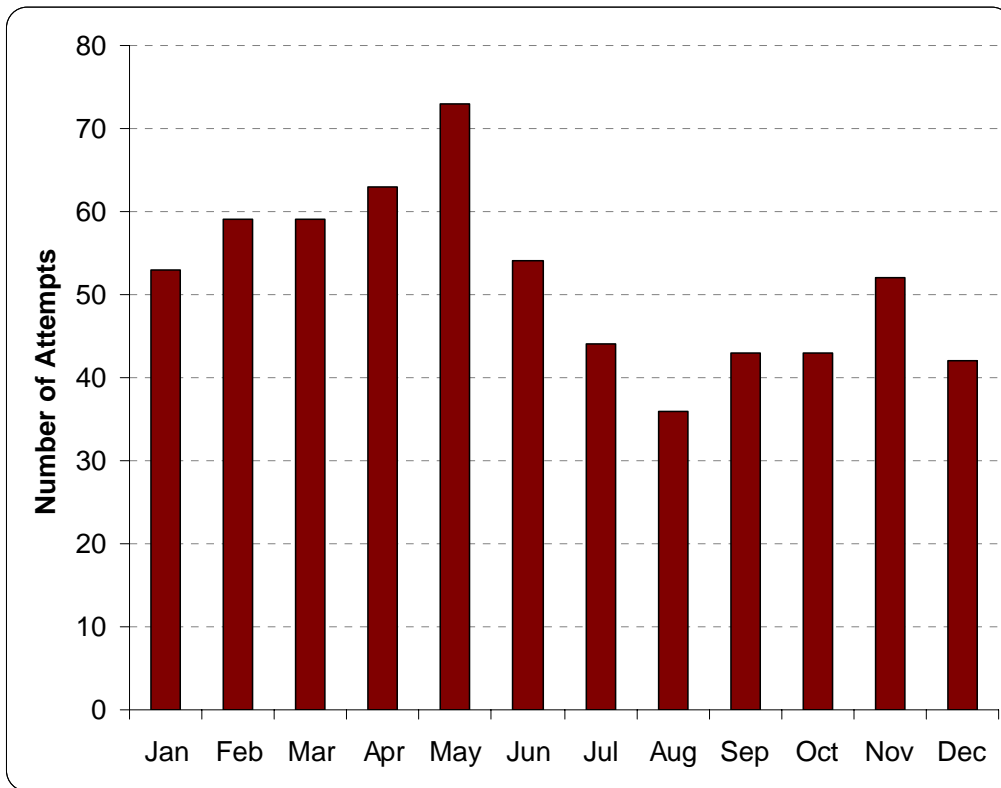


Figure 4. Attempts by month, 2006.

PAST ATTEMPTS

Forty-three percent of youth did not have a previous report of suicide attempt. Slightly fewer girls were first time attempters compared to boys—39% had not previously attempted suicide compared to 55% of boys. Thirty-nine percent of girls were reported to have at least one attempt, compared to 27% of boys.

History of a previous attempt is an important factor given that a previous attempt is the most reliable predictor of a future attempt, and possible, of completed suicide. Increased efforts to conduct follow-up and active outreach to youth treated for an attempt has potential value as a community-level intervention.

Table 6. Number of attempts by sex, 2006.

	None	One	Two	Three	Four or More	Unknown Number of Attempts*	Not Stated	Total
Male	78	18	3	2	0	16	25	142
Female	185	89	21	9	8	58	105	475

*Attempts reported, but the total number was not specified

STATED INTENT

The proportion of boys that told another person prior to an attempt was the same as that of girls— 28%. This means that about one in three youth told someone else that they were thinking about suicide. Fourteen percent of youth told their parents of their plans. About 4% told a friend, and 8% told a person unspecified by the data collection form. The remaining categories—teachers, counselors, siblings, etc., respectively comprise less than one percent.

Table 7. Stated intent by age and sex, 2006.

	Sex		Age Group			Total
	Male	Female	<=12	13-14	15-17	
Told another?						
Did tell	40	131	5	48	119	172
Did not tell	74	209	12	57	216	285
Unknown, or not stated	28	135	6	44	114	164
Told Who?						
Parent	24	62	6	25	56	87
Friend	6	17	0	6	17	23
Teacher	1	5	0	3	3	6
Counselor	2	1	0	1	2	3
Sibling	1	0	0	0	1	1
Other, not specified or stated	8	44	0	11	41	52

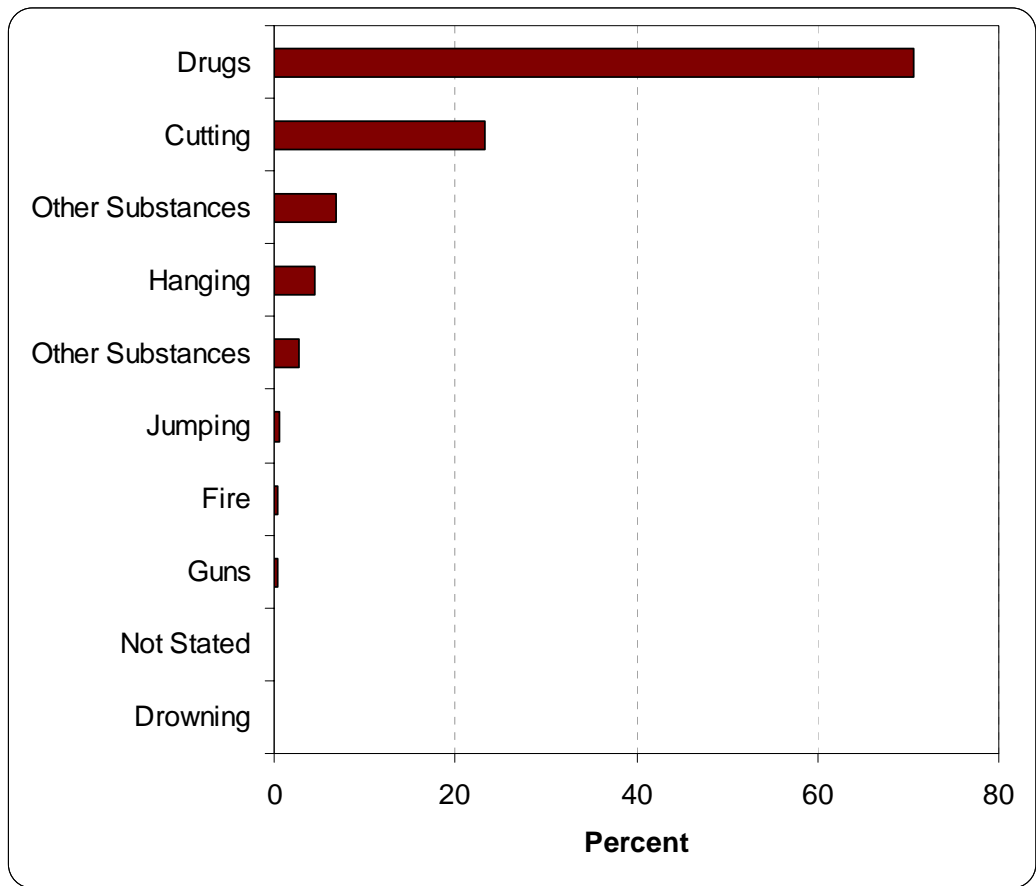
Since about one third of youth had informed somebody of their intent to attempt suicide, an intervention preventing an attempt could have occurred for a large proportion of the youth reported by the ASADS system. Parents have a particularly important role in preventing suicide attempts, since parents were the people most frequently informed about a potential attempt.

Raising awareness of youth suicide risk and suicide prevention resources helps increase the likelihood that at-risk youth that tell another person will be connected to prevention resources such as crisis centers, hotlines, or community/school gatekeepers.

METHOD

The ASADS data collection process allows for up to three attempt methods (e.g. poison, firearm, etc.) to be recorded for each attempt. Most attempts involve a single method. The attempts reported here focus on the first listed occurrence of specific methods of attempt, among three listed methods (e.g. if an attempt included 2 types of drugs, each listed separately, and cutting, then drugs would only be counted once). As a result, more than one method of attempt is included in the data for each case where multiple methods were used but if a specific method was listed multiple times only the first recorded instance of the method was used in the data summary.

Figure 5. Method of suicide attempts, 2006.



The method category “drugs” includes over the counter medicines, pharmaceuticals, and street drugs. Seventy-one percent of all attempts involved drugs. Sixty percent of boys and 74% of girls used drugs in an attempt. Between age groups, 43% of children 12 and under used drugs in an attempt; 74% of 13-14 year olds used drugs, and 71% of 15-17 year

olds did. Overall, acetaminophen was involved in 20% of all attempts; other analgesics were also involved in 20% of attempts. Antidepressants, barbiturates, and tranquilizers (one combined category) were involved in 24% of attempts. Illicit narcotics were involved in 6% of attempts.

Twenty-three percent of all attempts involved cutting. Seven percent of attempts involved ‘other’ substances (poisons). Five percent of attempts involved hanging/suffocation. Guns, drowning, fire, jumping were each less than 1% of attempt methods. Other methods accounted for less than 3% of attempts.

Table 8. Method of attempt by sex and age group, 2006.

	Sex		Age Group			Total
	Male	Female	<=12	13-14	15-17	
Drugs	85	351	10	110	318	438
Cutting	39	104	3	36	105	144
Other Substances	16	27	2	11	30	43
Hanging & Suffocation	9	19	8	8	12	28
Other	5	11	0	3	14	17
Jumping	1	3	0	1	3	4
Fire, Smoke	2	1	0	1	2	3
Guns	1	1	0	0	2	2
Drowning	0	1	0	1	0	1
Not Stated	0	1	0	0	1	1

*Includes only first mentioned type of method if method listed more than once. Total category is independent of age groups or sex.

HOSPITAL ADMISSION

Forty percent of youth that attempted suicide were admitted to hospitals as inpatients. Forty-three percent of boys and 38% of girls were admitted as inpatients.

Table 9. Hospital admission by sex and age group, 2006.

		Inpatient	Outpatient	Transferred	Not Stated
Sex	Age Group				
Male	<=12	1	6	4	0
	13-14	10	13	2	0
	15-17	50	35	19	2
Female	<=12	6	3	3	0
	13-14	40	65	18	1
	15-17	136	150	47	5

Youth living with a parent and stepparent were more likely to be admitted as an inpatient (54%) compared to youth living with both parents (34%), father only (34%), or mother only (45%). Youth living with foster parents were also more likely to be admitted as inpatients (54%).

There was a general trend toward increased likelihood of inpatient admission with an increase in the number of past attempts between first time attempters and those with at least 2 previous attempts. First time attempters (no previous reported attempts) were admitted as inpatients 44% of the time, while 51% those with one past attempt and 62% of those with two past attempts were admitted. Continuation of this trend is not in evidence for those with three or more attempts.

In assessing the first method listed on report forms, 42% of those that used drugs in their attempt were admitted as inpatients, compared to 48% among those that used other substances (poisons), 32% among those attempting by hanging or suffocation, and 23% of those that attempted suicide by cutting.

PSYCHOLOGICAL CONDITIONS

In the general population, a very high proportion of completed suicides are associated with psychological conditions including depression and substance abuse. In Oregon, this is about 80% of all suicides, according to the Oregon Violent Death Reporting System (<http://www.oregon.gov/DHS/ph/ipe/nvdrs/index.shtml>). Psychological conditions coupled with other stressors—such as family discord—increase the risk of suicide.

Multiple psychological conditions can be reported. The majority—74% of reported youth, had at least one psychological condition with the majority of those reporting depression. Similar proportions of boys and girls reported a psychological condition—about 75% for both groups. Slightly more major depression was reported among girls compared to boys, 47% to 40%, respectively. Similar proportions of boys and girls reported bipolar disorder—8% of girls compared to 10% of boys. Three times more boys reported attention deficit disorder compared to girls, 16% to 5%, respectively. More girls were reported to have post-traumatic stress disorder than boys—8% compared to 2% of boys.

Table 10. Psychological conditions by sex and age group, 2006.

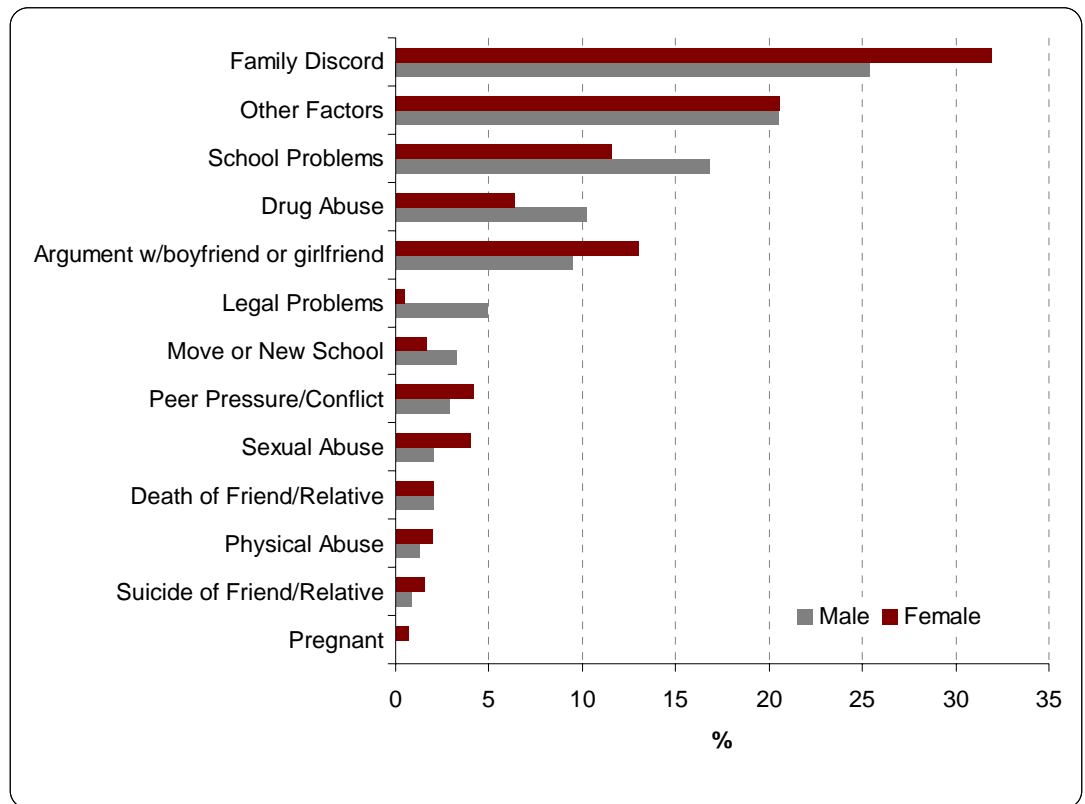
	Sex		Age Group			Total
	Male	Female	<=12	13-14	15-17	
Any Condition	107	352	18	105	336	459
Major Depression	57	221	7	64	207	278
Bipolar Disorder	14	38	2	9	41	52
Attention Deficit Disorder	23	26	1	10	38	49
Post-traumatic Stress Disorder	3	39	2	17	23	42
Adjustment Disorder	7	26	5	6	22	33
Conduct Disorder	13	20	2	9	22	33
Eating Disorder	0	13	0	4	9	13
Dysthymia	3	6	0	0	9	9
Schizophrenia	1	4	0	1	4	5
Other Psychological Conditions	37	115	5	37	110	152

Across age groups, there were similar proportions of youth that had at least one psychological condition. Data suggest that depression may play more of a role in suicide attempts among older age groups—30% of youth 12 and under were reported to have depression, while 43% of those 13-14 years of age and 46% of those 15-17 years of age were reported to have major depression. Twenty-two percent of children 12 and under were reported to have adjustment disorder; less than 5% of those 13 to 17 years of age were reported as having the same disorder.

RECENT PRECIPITATING EVENTS

Multiple factors contribute to suicidal behavior. The ASADS report form allows for multiple recent precipitating events that contributed to suicidal behavior to be recorded. Family discord was reported by 53% of those youth with a reported attempt. Females were more likely to report family discord—56% compared to 44% of males. Youth 15-17 years old were not as likely as younger children to report family discord.

Figure 6. Percent of suicide attempts by reasons given, by sex, 2006.



Among youth 12 and under, family discord was a reported factor among 57%. Among youth 15-17, family discord was a reported factor for 52% of attempts and among 56% of youth 13-14 years of age. Among youth with a history of suicide attempt, 29% were reported to have family discord as a precipitating factor in the most recently reported attempt.

School-related problems were reported for 22% of youth. School problems were reported for 29% of males and 20% of females. Among age groups, younger ages were less likely to report school-related problems than older youth. Seventeen percent of children 12 and under reported school

problems, while 23% and 22% of youth 13-14 and 15-17, respectively, were reported to have school-related problems as precipitating factors in suicidal behavior. Among youth with a history of suicide attempt, 13% reported school-related problems as a precipitating factor of the most recently reported attempt.

An argument with a boyfriend or girlfriend was reported among 21% of youth. Females were more likely than males to have an argument reported as a precipitating factor in suicidal behavior—23% compared to 16% of males. Not unexpectedly, the likelihood of an argument reported as a precipitating factor increased with age. Four percent of youth 12 and under had an argument reported, while 15% of youth 13-14 and 24% of youth 15-17 had an argument reported. Among youth with a history of suicide attempt, 12% reported an argument with a boyfriend or girlfriend as a precipitating factor of the most recently reported attempt.

Overall, substance abuse was reported among 13% of youth. Males were more likely than females to have substance abuse reported—18% compared to 11% of females. There were no children 12 and under with substance abuse as a precipitating factor, but 10% of 13-14 year olds and 14% of 15-17 year olds had substance abuse reported. Among youth with a history of suicide attempt, 7% were reported as having a substance abuse issue as a precipitating factor of the most recently reported attempt.

Peer pressure or conflict was reported among 7% of youth, with 5% of males and 7% of females having this factor reported. Seven percent of both 13-14 year olds and 15-17 year olds were reported as having conflict or peer pressure as a factor in suicidal behavior. Peer pressure or conflict was reported for 4% of children 12 and under.

Rape or sexual abuse was reported for 6% of youth, with 4% of males and 7% of females having sexual abuse reported as a factor. Four percent of children 12 and under, 6% of 13-14 year olds, and 6% of 15-17 year olds had sexual abuse reported as a precipitating factor.

The death of a friend or family member was reported for less than 4% of youth, and was the same for both males and females. There was little difference between age groups as well, with 4% of those 12 and under, 5% of those 13-14, and 3% of those 15-17 experiencing the death of a friend or family member as a possible contributing factor to suicidal behavior.

A move to a new school was reported as a precipitating factor for 4% of youth, with 6% of males and 3% of females having this event reported. Between age groups, 4% of youth 12 and under, 3% of youth 13-14 years

of age, and 4% of youth 15-17 were reported as having a move to a new school as a factor in suicidal behavior.

Physical abuse was reported for 3% of youth. Physical abuse was a precipitating factor for 2% of males and 3% of females. There was little difference among age groups for report of physical abuse.

Legal problems were a factor for 3% of youth— 8% for males but less than 1% for females. Two percent of 13-14 year olds and 3% of 15-17 year olds had legal problems reported a factor.

Suicide by a friend or relative was reported for 2% of all youth, with 3% of females and 1% of males having suicide reported as a factor. Three percent of 13-14 year olds and 2% of 15-17 years olds were reported as having suicide as a factor.

Pregnancy was reported as a factor for 1% of females. For both 13-14 year olds and 15-17 year old girls, pregnancy was a factor for about 1% of attempts.

Other reasons not classified were reported as factors for 36% of attempts, with males only slightly less likely to have unclassified reasons for suicidal behavior. There was a decreased likelihood of unclassified factors reported as age increased. For children 12 and under 43% had an unclassified factor reported, while 40% of children 13-14 and 34% of children 15-17 had another (unclassified) reason for suicidal behavior.

Table 11. Precipitating events by sex and age group, 2006.

	Sex		Age Group			Total
	Male	Female	<=12	13-14	15-17	
Family Discord	62	265	13	84	230	327
School Problems	41	96	4	35	98	137
Argument w/boyfriend or girlfriend	23	108	1	22	108	131
Drug Abuse	25	53	0	15	63	78
Peer Pressure/Conflict	7	35	1	11	30	42
Sexual Abuse	5	33	1	9	28	38
Death of Friend/Relative	5	17	1	8	13	22
Move or New School	8	14	1	5	16	22
Physical Abuse	3	16	1	4	14	19
Legal Problems	12	4	0	3	13	16
Suicide of Friend/Relative	2	13	0	5	10	15
Pregnant	1	6	0	1	6	7
Other Factors	50	171	10	60	151	221

Table 12. Personal events by attempt history, 2006.

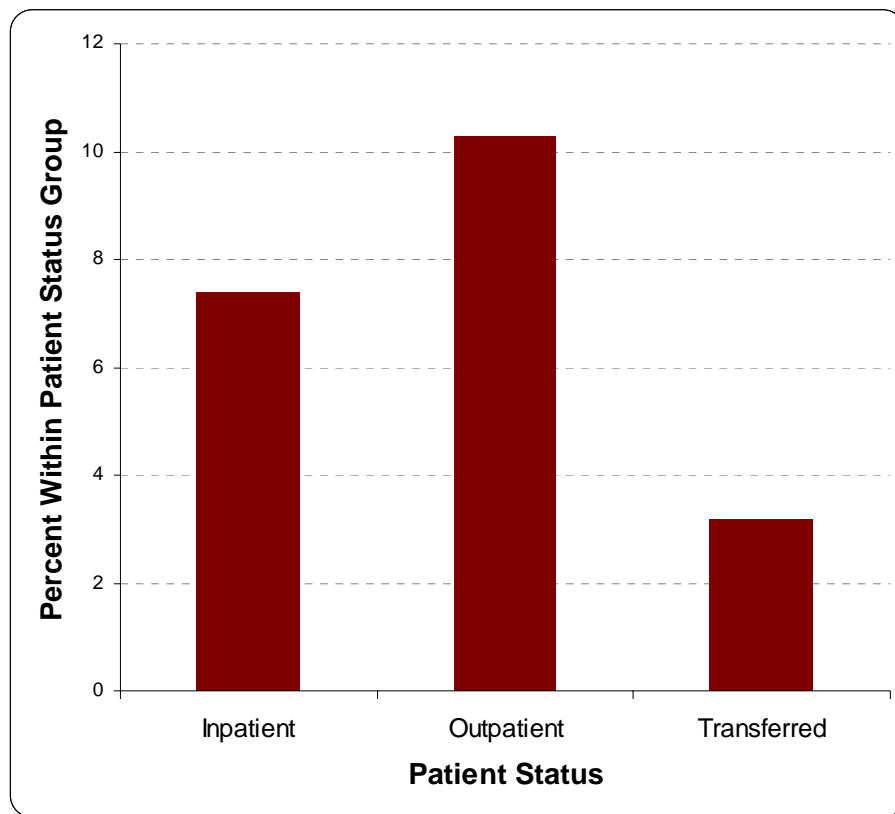
	No Previous Attempts	Previous Attempts	Unknown or not stated	Total
Family Discord	149	117	62	328
Other Factors	90	84	48	222
School Problems	72	52	14	138
Argument w/boyfriend or girlfriend	58	49	25	132
Drug Abuse	37	28	13	78
Peer Pressure/Conflict	22	15	5	42
Sexual Abuse	15	18	5	38
Death of Friend/Relative	10	10	2	22
Move or New School	9	12	1	22
Physical Abuse	7	11	1	19
Suicide of Friend/Relative	10	4	2	16
Legal Problems	10	6	0	16
Pregnant	1	4	2	7

REFERRAL

Hospitals that treat any adolescent for a suicide attempt are required by Oregon statute to refer those youth for follow-up care, such as in-patient or out-patient community resources, crisis intervention or other appropriate intervention. In 2006, about 8% of youth that presented to a hospital because of a suicide attempt were not referred for follow-up care. Ten percent of outpatients were not referred, and just over 7% of inpatient youth were not referred.

Out of 15 reporting hospitals with 10 or more reported attempts, 11 had 90% or more attempt patients referred. The lowest had only 74% of patients referred for follow-up care.

Figure 7. Percent of suicide attempt patients not referred for follow-up care, by admission status, 2006.



CONCLUSIONS

Suicide is a serious public health problem, and identifying and tracking suicide attempts is an important step in preventing suicide and reducing the burden of suicide in Oregon communities. However, communities, individuals, government agencies, hospitals and other health care providers must all act to address the goal of preventing suicide and suicide attempts from ever occurring. The following recommendations are based on information gathered through ASADS and the Oregon Youth Suicide Prevention Plan.

Communities

- Establish comprehensive prevention programs in schools
- Reduce harassment in schools and communities
- Enhance crisis services
- Establish and maintain crisis response teams
- Support suicide survivors
- Eliminate the stigma associated with behavioral health care
- Support efforts to reduce youth access to lethal means of self-harm
- Implement prevention programs in schools

Individuals

- Get involved in the local community in suicide prevention efforts.
- Recognize and respond appropriately to troubled youth that vocalize plans for suicide
- Parents: increase awareness of suicide risk factors, restrict means for at-risk youth

The health care community

- Improve follow-up care and implement outreach to suicide attempters
- Refer all attempters for follow-up care. Oregon statute requires that all youth presenting to a hospital following a suicide attempt must be referred for follow-up care
- Increase compliance with state law by providing timely, valid and reliable data to the ASADs system
- Improve access to affordable behavioral health care
- Reporting facilities (hospitals) should adhere to reporting protocol as detailed by DHS (<http://www.oregon.gov/DHS/ph/ipe/ysp/ASADS2.shtml>) to improve the validity and reliability of data. Accurate, timely, and reliable information leads to improved outcomes

GLOSSARY

Depression: a constellation of emotional, cognitive, and physiological signs and symptoms including sustained sad mood or lack of pleasure.

Frequency: the number of occurrences of a disease or health outcome within a specific period of time.

Intentional: an injury that is the result of purposeful human action directed against oneself or others.

Means: The mechanism or object used in an intentionally injurious act.

Means restriction: procedure, policy or method of limiting access to the mechanisms or methods used for intentionally injurious acts.

Method: procedure or technique used in self-inflicted harm.

Mortality: the rate or number of deaths in a specified population.

Prevention: a strategy that decreases the risk of onset of a condition or delays the harm associated with a condition.

Public health approach: a systematic approach to population health in which a problem is defined, risk and protective factors are identified, interventions are developed and tested, and effective interventions are widely adopted.

Rate: The number of events per unit of population, per time period (e.g. 5 deaths per 100,000 persons per year).

Risk factor: factors that increase the likelihood of an event.

Screening: using an assessment tool to identify persons that may be at risk.

Substance abuse: maladaptive patterned use of legal or illegal substances, resulting in recurrent adverse consequences through repeated use.

Suicidal ideation: Thoughts of harming or killing oneself.

Suicide attempt: self-inflicted destructive act with explicit or inferred intent to die, with a non-fatal outcome.

Suicide: a fatal self-inflicted injurious act with explicit or inferred intent to die.

Surveillance: an ongoing and systematic collection of data for public health action.

YOUTH SUICIDE ATTEMPTS IN OREGON

APPENDIX

Table 1A. Number of suicides among Oregon youth by age and sex, 2000-2006.

		Age										Total
		10	11	12	13	14	15	16	17	18	19	
		N	N	N	N	N	N	N	N	N	N	
Year	Sex											
2000	F	1	0	0	1	1	1	0	1	2	1	8
	M	0	1	0	1	0	4	1	5	13	4	29
2001	F	0	0	0	0	3	0	0	0	1	1	5
	M	0	0	0	1	1	1	2	5	1	4	15
2002	F	0	0	0	1	0	1	0	2	1	1	6
	M	0	0	0	1	1	1	5	1	3	5	17
2003	F	0	0	0	0	0	1	0	0	1	1	3
	M	0	0	0	0	0	1	4	2	2	4	13
2004	F	0	0	0	0	1	1	1	0	0	0	3
	M	0	0	0	1	0	1	2	3	1	7	15
2005	F	0	0	0	0	0	0	2	0	0	0	2
	M	1	0	0	0	2	3	3	3	3	4	19
2006	F	0	0	0	0	0	0	1	0	3	2	6
	M	0	0	0	0	2	2	0	4	1	7	16

YOUTH SUICIDE ATTEMPTS IN OREGON

Table 2A. Number of suicides among Oregon youth under 20 years of age by county of residence , 2000-2006.

County of Residence	Year							Total
	2000	2001	2002	2003	2004	2005	2006	
	N	N	N	N	N	N	N	
Baker	0	0	0	0	0	0	0	0
Benton	1	0	1	1	0	0	0	3
Clackamas	0	0	0	0	0	0	0	0
Clatsop	1	1	1	0	0	0	0	3
Columbia	0	0	0	0	0	1	0	1
Coos	0	0	0	0	1	0	2	3
Crook	0	1	0	0	0	0	0	1
Curry	0	0	1	1	0	0	0	2
Deschutes	0	0	2	0	0	3	1	6
Douglas	1	2	1	0	1	1	1	7
Gilliam	0	0	0	0	0	0	0	0
Grant	1	0	0	1	0	0	0	2
Harney	1	0	0	0	0	0	0	1
Hood River	0	1	0	0	0	0	0	1
Jackson	4	2	0	0	2	1	1	10
Jefferson	1	1	0	0	0	0	0	2
Josephine	1	1	0	2	1	0	1	6
Klamath	3	2	0	0	0	2	1	8
Lake	0	0	0	0	0	0	0	0
Lane	3	2	1	1	1	2	1	11
Lincoln	1	0	0	0	0	0	0	1
Linn	0	1	2	0	1	0	1	5
Malheur	0	0	0	1	0	0	0	1
Marion	3	1	3	1	0	2	2	12
Morrow	1	0	0	0	0	0	0	1
Multnomah	3	1	5	4	4	2	6	25
Polk	1	0	0	1	0	0	0	2
Sherman	0	0	0	0	0	0	0	0
Tillamook	1	0	0	0	0	0	0	1
Umatilla	2	0	0	0	0	1	1	4
Union	1	0	0	0	1	0	0	2
Wallowa	0	0	0	0	1	0	0	1
Wasco	1	0	1	0	0	0	0	2
Washington	3	3	1	2	2	2	3	16
Wheeler	0	0	0	0	0	0	0	0
Yamhill	0	1	1	0	2	3	0	7

YOUTH SUICIDE ATTEMPTS IN OREGON

Table 3A. Number of suicides attempts among Oregon youth under 18 years of age by residence county, age, and sex, 2006. (* Indicates omitted count to avoid breach of confidentiality)

Resident County	Sex		Age Group			All
	Male	Female	<=12	13-14	15-17	
	N	N	N	N	N	N
Baker	*	*	*	*	*	2
Benton	3	13	0	4	12	16
Clackamas	15	50	3	11	51	65
Clatsop	*	*	*	*	*	5
Columbia	*	*	*	*	*	6
Coos	0	16	0	4	12	16
Crook	*	*	*	*	*	3
Curry	*	*	*	*	*	1
Deschutes	8	34	0	14	28	42
Douglas	6	11	1	4	12	17
Gilliam	*	*	*	*	*	0
Grant	*	*	*	*	*	1
Harney	*	*	*	*	*	4
Hood River	*	*	*	*	*	5
Jackson	11	40	4	11	36	51
Jefferson	*	*	*	*	*	4
Josephine	3	17	1	6	13	20
Klamath	*	*	*	*	*	3
Lake	*	*	*	*	*	0
Lane	27	78	3	22	80	105
Lincoln	*	*	*	*	*	0
Linn	3	7	0	4	6	10
Malheur	*	*	*	*	*	1
Marion	11	35	1	11	34	46
Morrow	*	*	*	*	*	0
Multnomah	23	81	4	26	74	104
Polk	*	*	*	*	*	4
Sherman	*	*	*	*	*	0
Tillamook	*	*	*	*	*	4
Umatilla	*	*	*	*	*	7
Union	*	*	*	*	*	9
Wallowa	*	*	*	*	*	0
Wasco	*	*	*	*	*	0
Washington	15	32	2	12	33	47
Wheeler	*	*	*	*	*	0
Yamhill	*	*	*	*	*	4

YOUTH SUICIDE ATTEMPTS IN OREGON