Youth suicide attempts

The risk of suicide increases dramatically during the teen years. During 2005, 773 adolescent suicide attempts were reported by Oregon hospitals, about 16 percent fewer than during each of the previous two years. This decrease is a reporting artifact reflecting the change in priorities at the Oregon Center for Health Statistics, not a true decline in the number of suicide attempts (see data caveats on page 8-3). At the same time, the number of attempts ending in death increased to 21, up from 18 in 2004 and 16 in 2003.

The Oregon reporting system identifies only attempts by youth with injuries severe enough to require emergency care at a hospital; consequently, the number of attempts reported must be considered a minimum. The proportion of youth described with a specific characteristic is based only on those cases with known values; that is, attempts in the not stated categories are excluded before the percentages are calculated. The Technical Notes section in Appendix B describes the methodology and limitations of the data.

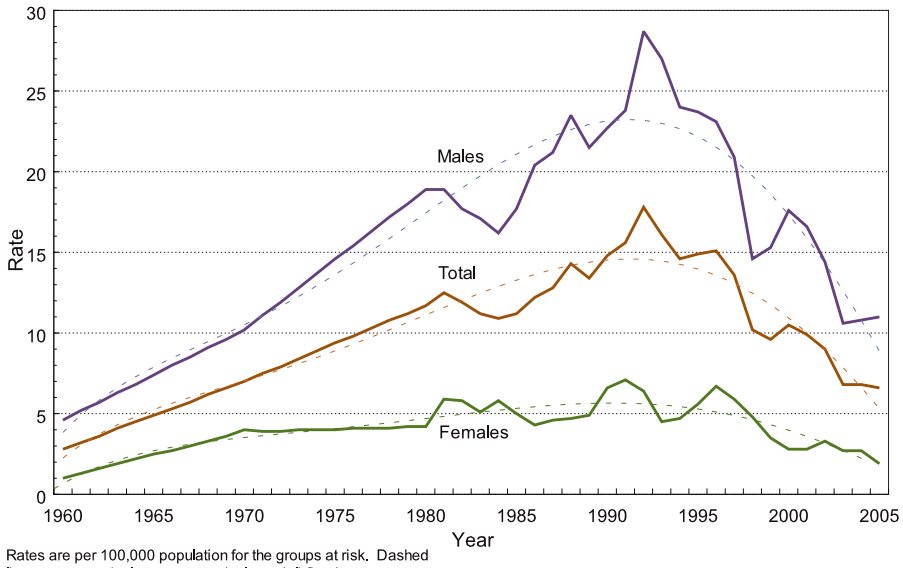
During the past decade, the suicide rate for Oregonians ages 15-19 has fallen to a level not seen since the 1970s.

Suicide deaths

Temporal trends

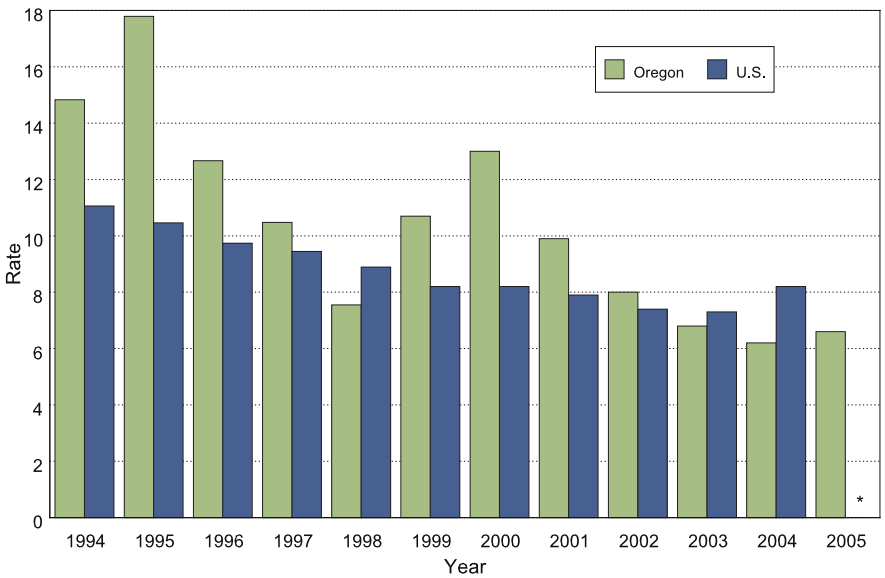
During 2005, 21 Oregonians 19 or younger died by suicide, three more than during the previous year, but still one of the lowest counts during the past dozen years. (Table 8-1 and Table 8-2). In 1995, by comparison, 43 attempts resulted in death. Because the number of events in any one year is small and subject to considerable random statistical variation, a

Figure 8-1.
Suicide Rates for 15- to 19-Year-Olds, 1959-61, 1969-71, 1979-81, and Three-Year Moving Averages, 1981-2005, Oregon Residents



Rates are per 100,000 population for the groups at risk. Dashed lines represent the least squares (polynomial) fitted curves.

Figure 8-2.
Suicide Death Rates for 15- to 19-Year-Olds,
Oregon and the U.S., 1994-2005



* 2005 U.S. data are not available.

Suicide rates by race/ethnicity, Oregon residents, aged 10-24, 1990-2005		
State total	10.2	1,052
White	10.7	903
African-American	11.2	27
American Indian*	16.1	29
Asian/Pac. Is. §	5.7	23
Hispanic	6.5	68

Note: all race categories are non-Hispanic.
* Statistically significantly higher than the state rate.
§ Statistically significantly lower than the state rate.

better measure of the risk of suicide among teens are three-year moving rates, commonly expressed as the number of deaths among 15- to 19-year-olds per 100,000 population.[1] At 6.6 per 100,000 population, the 2003-2005 suicide rate matched the 2002-2004 rate and was the lowest during the past quarter century.

During 1959-1961, the teen suicide rate was 2.8 per 100,000 population, but during the ensuing years it increased inexorably reaching a record high of 17.8 during 1990-1992.[2] Since then, the rate has fallen dramatically, declining 62.9 percent by 2003-2005. At its peak during 1990-1992, the suicide rate for males was 28.7 while that for females was 6.4, but by 2003-2005, the rates had fallen to 11.0 and 1.9, respectively.[3]

While most suicide deaths occurred at home, some youths who were transported to emergency departments died in the hospital. The risk of death is affected by the locality of the attempt, the degree of injury, and the time elapsed between injury and treatment.

Oregon compared to the nation

Oregon's youth suicide rate had historically been higher than the nation's, but in recent years has shown considerable improvement, both in real terms and compared to the national rate (Figure 8-2). During the three-year period 2002-2004 (most recent available data), the national suicide rate for 15- to 19-year-olds was 7.6 per 100,000 population. By comparison, the state's rate was 6.8, or 10.5 percent lower. Oregon's rate vis-à-vis other states (and the District of Columbia) has declined in recent years, falling from the 14th highest during 1991-1993 to 36th highest during 2003-2005.

Suicide attempts

Most attempts are probably not made with death as the goal. Rather, they are cries for help motivated by a desire to resolve interpersonal conflicts -- especially in the case of medically nonserious attempts.

Data caveats

The Adolescent Suicide Attempt Data System (ASADS) identifies only those nonfatal attempts among youths 17 or younger who sought care at a hospital and for whom a report was filed. The decline seen in the number of reports for 2005 (about 16 percent compared to the previous two years) is a reporting artifact reflecting changes in staffing and priorities at the Center for Health Statistics (CHS). During previous years, when hospitals failed to file the required suicide attempt report forms, CHS staff would contact the hospitals requesting compliance with ORS 441.750, the relevant statute. This was not done during 2005-2007. Moreover, because reporting by hospitals can vary from year to year, caution should be used when interpreting youth suicide attempts over time, particularly by county. See the Technical Notes section in Appendix B for additional information on methodology.

Gender

In recent decades, girls have consistently been more likely to attempt suicide than boys; this pattern persisted in 2005 when three-fourths (75.7 percent) of all reported attempts were by girls. (Table 8-3).

Age

During 2005, five children under the age of 10 attempted suicide; the youngest were two six-year-old girls, one of whom

Number of Attempts by Year and Sex; 1988-2005

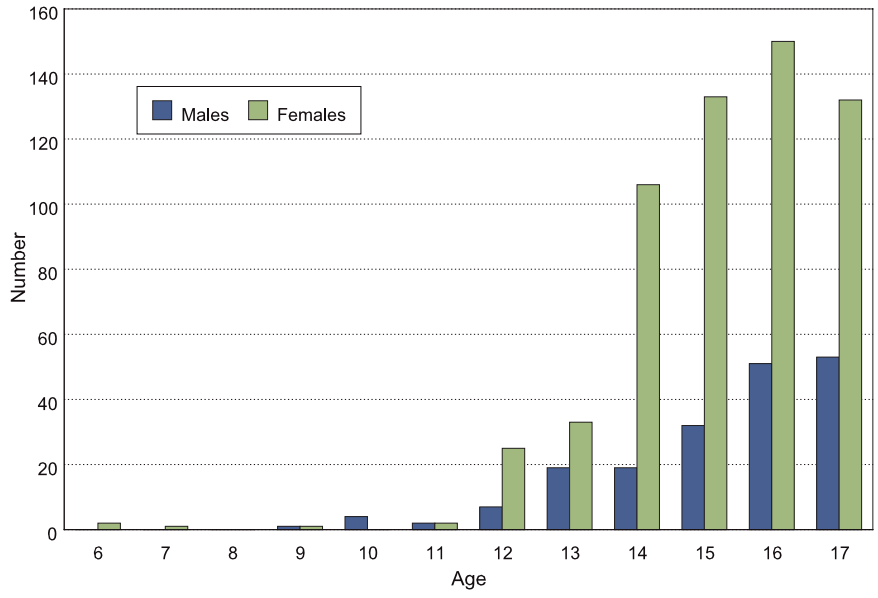
Year	Total	Male	Female
1988	648	110	535
1989	624	120	499
1990	526	118	406
1991	577	124	453
1992	685	141	544
1993	723	113	610
1994	773	187	586
1995	753	150	603
1996	778	163	615
1997	736	151	585
1998	761	190	571
1999	738	180	558
2000	802	178	624
2001	865	202	663
2002	876	221	655
2003	922	207	715
2004	920	209	711
2005	773	188	585

Attempters of unknown sex are included in the total. Ideators are excluded beginning in 1999.

Number of attempts by age and sex, 2005

Age	Total	Male	Female
6	2	0	2
7	1	0	1
8	0	0	0
9	2	1	1
10	4	4	0
11	4	2	2
12	32	7	25
13	52	19	33
14	125	19	106
15	165	32	133
16	201	51	150
17	185	53	132

Figure 8-3.
Number of Suicide Attempts by Sex,
Oregon Minors, 2005



took an overdose of analgesics and the other who lacerated her arms. The latter harmed not only herself but also her mother and animals. School-related problems were factors for both girls. (The youngest child ever reported to have attempted suicide in Oregon was a five-year-old in 2001.) Forty-five attempts by preteens were reported. (Table 8-3). Attempts by 13- and 14-year-olds numbered 177 and those by 15- to 17-year-olds totaled 551. As in years past, 15- to 17-year-olds accounted for the majority (71.3 percent) of all reported attempts.

Number of attempts by race and ethnicity, 2004-2005

Race	2005	2004
Total	773	920
White	629	770
African-American	36	28
American Indian	11	13
Chinese	0	1
Japanese	0	0
Asian Indian	0	2
Korean	1	1
Vietnamese	0	0
Other Asian	4	8
Hawaiian	0	0
Guamanian	0	0
Samoan	0	0
Other Pacific Islander	0	2
Other races	2	2
Multiple races	6	5
Hispanic	42	55
Not stated	42	33

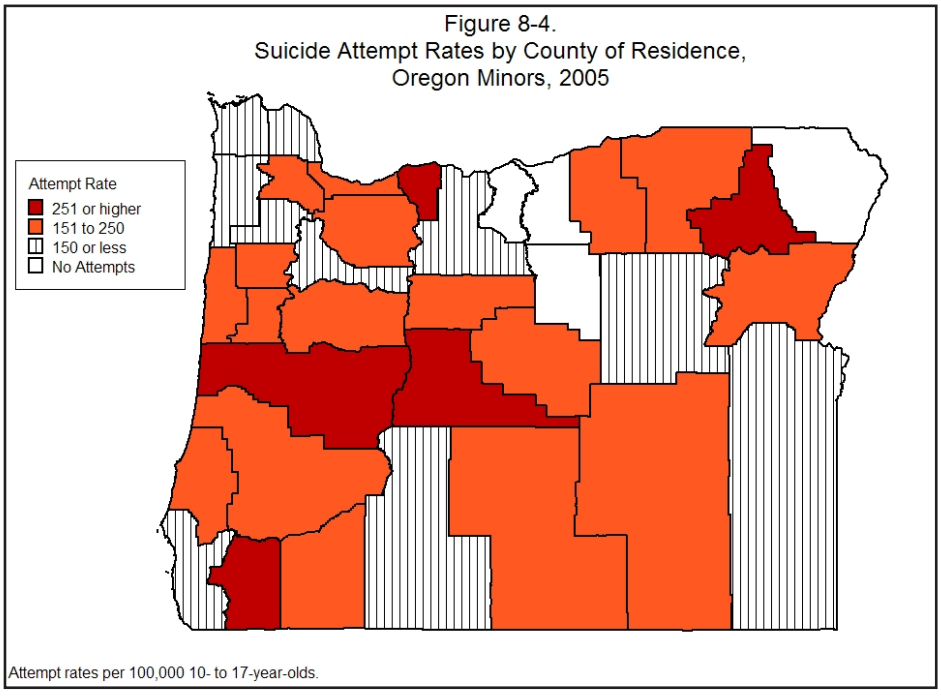
Race

Reflecting the racial/ethnic composition of the state, most attempts were made by white youth. Beginning in 2002, more detailed race information was collected permitting more than one race to be listed on the attempt form for each youth who attempted suicide. Hispanics may be of any race; in this report, Hispanic ethnicity takes precedence over race. Attempt rates by race during 2003-2005 were: black, 263.4 per 100,000 population; white, 226.9; American Indian, 183.2; Hispanic, 103.0; and Asian/Pacific Islander, 76.5.

Household situation

Among youth reported to have attempted suicide, the largest group lived with their mother only (29.6 percent), followed closely by youth who lived with both parents (27 percent). A smaller proportion lived with a parent and stepparent (13.9 percent). About one in 25 (4.2 percent) of the attempts were made by adolescents living in a juvenile facility. (Table 8-4). Tri-county[4] youth were less likely to live with both parents than those living elsewhere (23.8 percent versus 27.6 percent of those living in other Western Oregon counties and 35.0 percent of those living east of the Cascades).

Figure 8-4.
Suicide Attempt Rates by County of Residence,
Oregon Minors, 2005



Geographic distribution

While the suicide attempt rate for the state was 191.8 per 100,000 (10- to 17-year-olds) during 2005, the rates for individual counties varied widely. (Figure 8-4). Among the counties with 10 or more attempts, the three with the highest rates were: Josephine, 349.3; Deschutes, 285.5; and Lane, 267.7. No attempts were reported for adolescents in four counties, all of which are east of the Cascades: Gilliam, Sherman, Wallowa, and Wheeler. Table 8-19 lists the number of attempts reported by individual Oregon hospitals for the last 11 years. Because of incomplete reporting by some hospitals, attempt rates by county should be interpreted with caution. Data from death certificates are less susceptible to reporting bias. See sidebar for the number of suicides (and rates) by county.

Place of attempt

Attempts were most commonly made in the home, either the adolescent's own home (78.9 percent), or another's home (5.1 percent), or a foster home (1.7 percent). (Table 8-6). About one in 20 were made in juvenile facilities (4.8 percent) and one in 25 at school (3.9 percent).

Month and date of attempt

The summer school vacation months are consistently the season of lowest risk and spring the season of greatest risk; 16.8 percent of all attempts occurred from June through August compared to 31.8 percent during March through May. About one in four attempts occurred during the winter (28.1 percent) and fall (23.3 percent).

Typically more attempts occur on Monday than any other day of the week, but during 2005, attempts were clustered during the first three days of the workweek with the largest proportion, 17.5 percent, occurring on Tuesday. Attempts are typically least frequent on Saturdays, and this was the case during 2005 (11.6 percent).

Past attempts

About one-half (47.0 percent) of all attempts were made by youth who had made previous attempts, but females were more likely than males to do so (49.6 percent versus 39.5 percent). (Table 8-7). The youngest child to make a repeated attempt was just 10 years old. Youth living with both parents were least likely to have made prior attempts (35.2 percent) while those living with a parent and stepparent, or just their mother or father, were markedly more likely (45.5 percent), but those most apt to have made previous attempts lived with persons other than their parents (56.6 percent).[5]

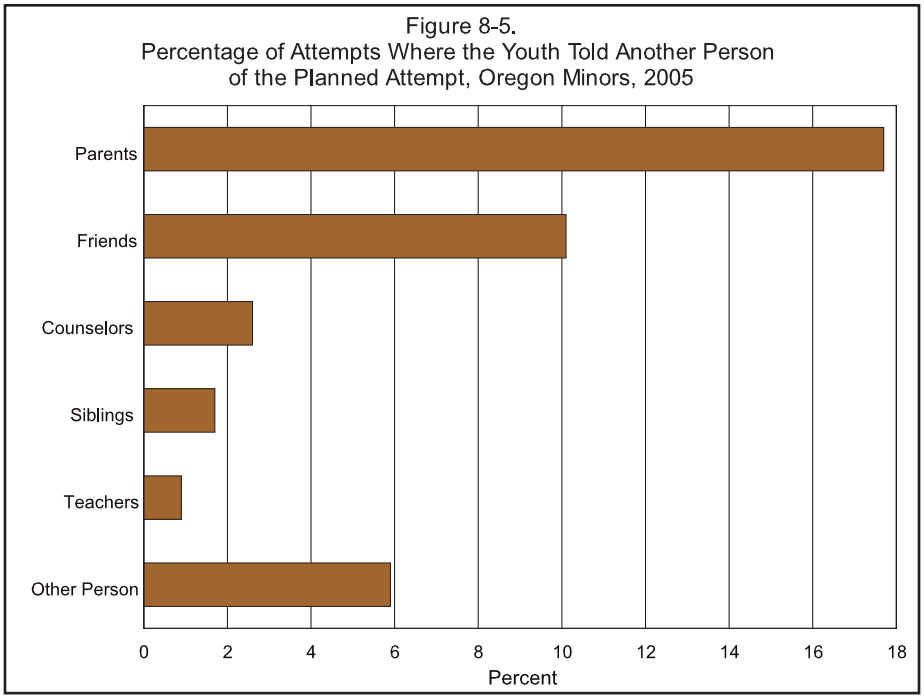
Because a single adolescent may make multiple attempts during any one year, it should be remembered that references to the number or proportion of attempts with a givencharacteristic may be influenced by the repeated attempts of a single individual.

Suicide rates by county, Oregon residents, aged 10-24, 1990-2005

County	Rate	Number
State total	10.4	1,129
Baker	17.7	9
Benton§	6.2	23
Clackamas	8.8	95
Clatsop	15.6	18
Columbia	6.8	10
Coos	12.0	23
Crook	12.0	7
Curry	13.1	7
Deschutes	9.2	31
Douglas*	17.0	55
Gilliam	17.2	1
Grant	11.8	3
Harney*	33.2	8
Hood River	15.6	10
Jackson	10.4	58
Jefferson*	23.7	14
Josephine	7.9	17
Klamath	14.6	31
Lake	16.8	4
Lane	9.8	110
Lincoln	12.5	15
Linn	11.7	39
Malheur	8.3	9
Marion	10.7	99
Morrow	2.8	1
Multnomah	11.3	220
Polk §	5.5	12
Sherman	16.3	1
Tillamook	8.7	6
Umatilla	12.8	30
Union	7.5	7
Wallowa	17.7	4
Wasco*	20.1	15
Washington §	7.8	102
Wheeler	23.0	1
Yamhill	10.8	32

Rates per 100,000 population.
* Statistically significantly higher than the state rate.
§ Statistically significantly lower than the state rate.

Figure 8-5.
Percentage of Attempts Where the Youth Told Another Person of the Planned Attempt, Oregon Minors, 2005



Stated intent

Preteens were less likely than older teens to tell another person their planned attempt.

About one in four (38.2 percent) youth told another person of their plan to attempt suicide prior to the act, warnings that could, and should, have led to intervention. There was little difference by gender in the likelihood of the youth telling another person of his or her plan. Preteens were only about half as likely as 15- to 17-year-olds to tell another person of their intended attempt (19.5 percent versus 42.4 percent). (Table 8-8). In about one of every six occurrences (17.7 percent), youths told their parents of their plan for self-harm prior to doing so. One in 10 (10.1 percent) had told their friends ahead of time. Siblings, counselors, and teachers were also told, but much less frequently. The category "other persons" in Table 8-8 includes grandparents, aunts, uncles and other persons.

Tri-county[4] youth were far more likely to tell another person of their plan for a suicide attempt, with nearly half doing so (49.5 percent) compared to about one-third (31.8 percent) of youth living in other counties west of the Cascade Range and one-fifth (18.6 percent) of those living east of the Cascades.

Method

Oregon adolescents used a variety of methods in their attempts, but ingestion of drugs alone accounted for the majority (59.1 percent). (Up to three different attempt methods can be recorded for each attempt, but nine in 10 attempts involved a single method.) Females were more likely than males to ingest drugs (63.8 percent versus 44.7 percent). As age increased, so did the likelihood of youth choosing this method: ≤12, 42.2 percent; 13-15, 52.5 percent; 15-17, 62.6 percent. Overall, 19.1 percent of all attempts involved acetamino-

phen, a substance of particular concern because of its potential lethality and long-term toxic effects, consequences not commonly known by adolescents. Aspirin, by comparison, was used in 6.5 percent of attempts. Other recurring drugs included Advil®, Benadryl®, ibuprofen, Motrin®, Naprosyn®, Prozac®, trazodone, Vicodin®, and Zoloft®.

Cutting and piercing injuries alone ranked second, accounting for 21.5 percent of all cases, with lacerations of the wrists and arms accounting for nearly all of the injuries. Knives and razor blades were most commonly used. Males tend to use more violent and/or lethal methods and this is seen in the proportion inflicting cutting/piercing injuries: one in four males used this method compared to one in five females (25.0 percent versus 20.3 percent). There were no clear trends by age.

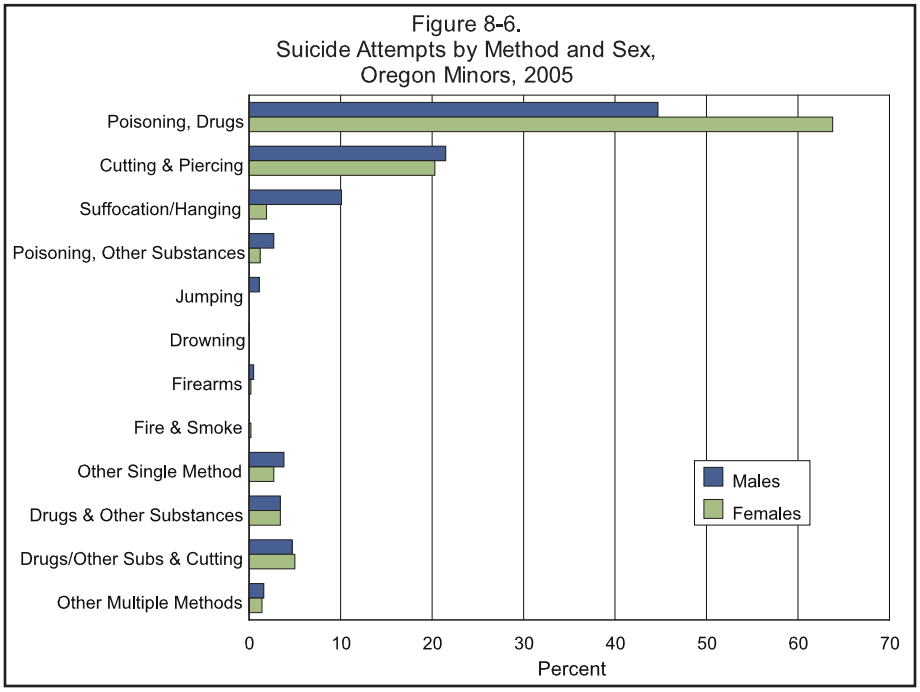
Eighty percent of attempts with firearms ended in death.

Hanging/suffocation alone ranked third and was used by 3.9 percent of the youth who attempted suicide; males were far more likely to use this method, 10.1 percent versus 1.9 percent of females. The younger an attempter the more likely hanging and/or suffocation was used, with preteens almost 10 times more likely than 15- to 17-year-olds to injure themselves in this way. Attempts involving hanging and/or suffocation are second only to gunshots in the risk of death.

Ranking fourth, at 1.6 percent, was ingestion of substances other than drugs. Among those used were: alcohol, antifreeze, bleach, Drano®, nail-polish remover, Pine-Sol®, and Tilex®.

About one in 10 (9.7 percent) of the attempts involved multiple methods, most commonly drugs and/or other substances combined with cutting (4.7 percent). Drugs combined with

Figure 8-6.
Suicide Attempts by Method and Sex,
Oregon Minors, 2005



other substances, but without cutting/piercing injuries, accounted for 3.4 percent of the attempts.

The categories "other single method" and "other multiple methods" in Table 8-9 include actions such as jumping in front of a bus, attempting to jump from a moving vehicle, ingesting pennies, hitting head, and attempted self-immolation.

Table 8-10 shows that youths making repeated attempts were more likely to use multiple methods. Although not the case during 2005, adolescents making repeated attempts often use more violent methods, although not necessarily more lethal methods.

Youths admitted as inpatients by region

Tri-county - 59.8%
Other Western - 46.1%
Eastern - 29.5%

Hospital admission status

Half (49.4 percent) of all youth who attempted suicide were admitted by hospitals as inpatients. Reflecting their propensity to use more violent/lethal methods, males were somewhat more likely to be admitted as inpatients, 55.9 percent versus 47.3 percent of females. Preteens were more often admitted as inpatients than were teens (64.4 percent versus 47.9 percent).

Striking differences exist by region: 59.8 percent of Tri-county[4] youth who attempted suicide were admitted as inpatients compared to 29.5 percent of youth living east of the Cascade Range. Elsewhere west of the Cascades, 46.1 percent of youth who attempted suicide were admitted. Youth who lived with both parents were less likely to be admitted as inpatients than were those in other living situations (43.2 percent versus 53.8 percent).

Among the single-method categories with at least 10 attempts reported, youth who attempted to hang or suffocate themselves were most likely to be admitted as inpatients. Seventy percent were admitted compared to about one-third (34.0 percent) of those who cut themselves, the group least likely to be admitted. (Table 8-12).

The likelihood of inpatient admission increased with the number of risk factors reported by the youth (see "Recent personal events" below). While 38.7 percent of those reporting one risk factor were admitted as inpatients, 53.1 percent of those reporting two factors, 70.1 percent of those reporting three factors, and 82.6 percent of those reporting four or more factors were admitted as inpatients.

Psychological conditions

Nearly all (83.0 percent) youth who intentionally injured themselves were reported by their caregivers to be suffering one or more psychological conditions. By far the most commonly reported condition was major depression (53.5 percent). It was diagnosed slightly more often among females than males (54.4 percent versus 50.9 percent) and more often

among 15- to 17-year-olds than preteens (56.1 percent versus 43.9 percent). Youths diagnosed with depression were more likely to have made prior attempts than those not so diagnosed (52.2 percent versus 41.8 percent).

Ranking second and third were attention deficit (hyperactivity) disorder (11.6 percent) and adjustment disorder (9.4 percent). Among the conditions reported in at least one of every 20 cases were conduct disorder (8.4 percent), bipolar disorder (8.0 percent), and posttraumatic stress disorder (7.0 percent). Besides the disorders shown in Table 8-13, other recurring diagnoses included: anger management, anxiety, mood disorder/instability, obsessive-compulsive disorder, oppositional defiant disorder, personality disorder, and self-mutilation. Other notable conditions included Asperger's syndrome, borderline personality disorder, explosive disorder, gender identity, histrionic personality disorder, narcissism, postpartum depression, schizoaffective disorder, sleep disorder, social phobia, and Tourette's syndrome.

Mental disorders were least often reported for youth living with both parents (76.2 percent) and most often for those living with foster parents (96.2 percent). Youth with mental disorders were far more likely to make repeated attempts (50.8 percent) than those who were not so diagnosed (28.2 percent).

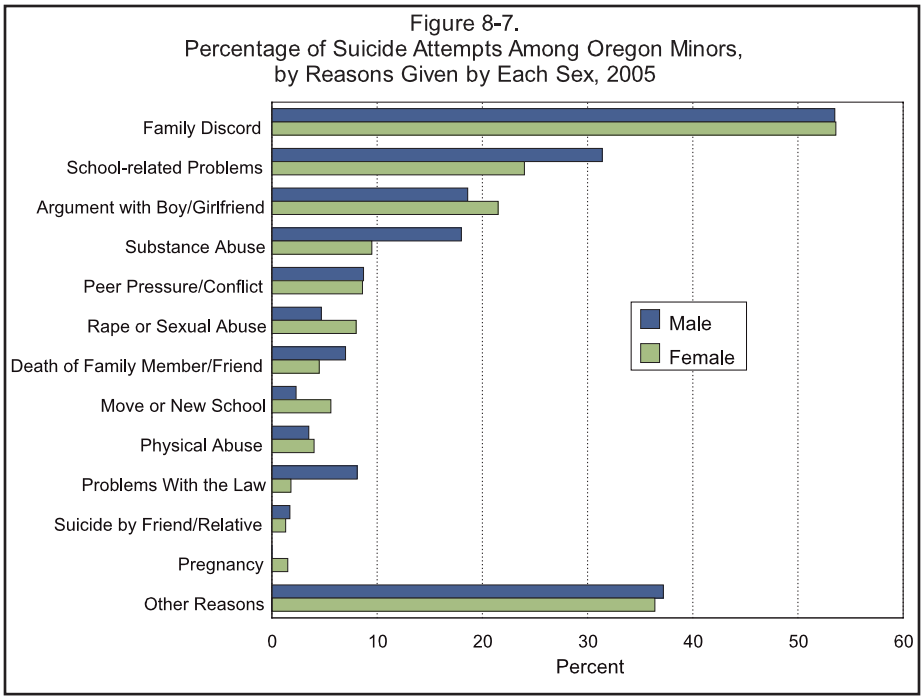
Attention deficit (hyperactivity) disorder was reported significantly more often among Tri-county[4] youth than others (13.8 percent versus 9.0 percent in other western counties and 5.3 percent east of the Cascades). Posttraumatic stress disorder, too, followed the same pattern: Tri-county, 8.9 percent; other western counties, 4.8 percent; and, east of the Cascades 3.5 percent. Conduct disorder was also more frequently reported in the Tri-county area (11.9 percent versus 3.9 percent in other western counties and 6.2 percent east of the Cascades).

Percentage of youth with bipolar disorder who made repeated attempts: 73.3

Percentage without the disorder who did: 44.9

Youth with certain psychological disorders were more likely to make repeated attempts. About one-half (52.2 percent) of youth with major depression had made previous suicide attempts compared to two-fifths (41.8 percent) of those where depression was not reported. Other conditions showed even stronger significant associations with repeated attempts: 73.3 percent of youth with bipolar disorder had made previous attempts compared to 44.9 percent of those without the disorder; 69.0 percent of those with posttraumatic stress disorder had made prior attempts compared to 45.4 percent of those without the disorder; and, 66.7 percent of those with attention deficit (hyperactivity) disorder had made previous attempts compared to 44.6 percent of those without the disorder. For all mental disorders combined, the figures were 50.8 percent and 28.2 percent, respectively.

Figure 8-7.
Percentage of Suicide Attempts Among Oregon Minors, by Reasons Given by Each Sex, 2005



Certain mental disorders were associated with an increased likelihood of admission as an inpatient. Among these were conduct disorder where 71.2 percent of youth who had made an attempt were admitted compared to 47.6 percent of youth without the disorder; posttraumatic stress disorder where 69.4 percent were admitted compared to 48.0 percent of those without the disorder; bipolar disorder where 69.1 percent were admitted compared to 47.9 percent of those without the disorder; and, attention deficit (hyperactivity) disorder where 61.3 percent were admitted compared to 48.0 percent of those without the disorder. There was no significant difference regarding admission for mental disorders as a whole.

Recent personal events

Suicidal behavior is a consequence of a complex interaction of factors, not a single event, although a single event may act as a trigger. (Figure 8-7). The report form allows one or more events/factors leading to the attempt to be recorded.

Lack of social support is a common thread among adolescents who attempt suicide, especially among those who cite multiple reasons. One 14-year-old girl, for example, was an adoptee who had been sexually abused by her father and was now being physically abused by her adoptive mother and the mother's male friends; besides family discord, the young girl had just transferred to a new school.

Overall, one in 10 (10.4 percent) of youth who attempted suicide had at least four risk factors, although this varied markedly depending on with whom the youth was living; just 3.9 percent of those living with both parents were reported to have four or more risk factors compared to 14.3 percent of those living with their father only and 14.4 percent of those living with their mother only.

Youth admitted as inpatients were more than four times as likely to be identified with four or more of the risk factors listed below than were those who were discharged from the emergency room (15.9 percent versus 3.5 percent). As the number of risk factors increased so did the likelihood of an individual having been diagnosed with a psychological disorder. For example, 4.2 percent of adolescents with one risk factor were diagnosed with a conduct disorder compared to 8.0 percent of those with two factors, 12.6 percent of those with three factors, and 22.9 percent of those with four or more factors.

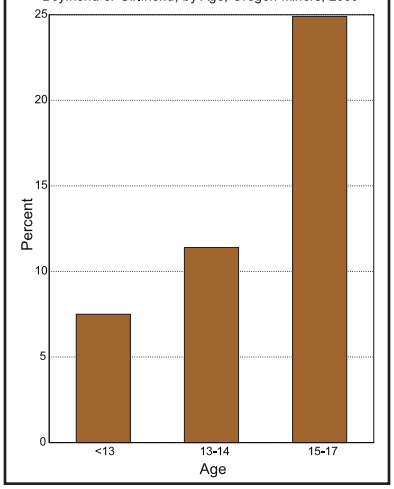
Family discord was the most common reported risk factor.

Family discord was, by far, the most common factor associated with suicide attempts. More than half (53.6 percent) of Oregon minors reported discord as a precipitating event. (Table 8-14). Although typically reported somewhat more often among females than males, in 2005 there was essentially no difference by gender. There was also no clear trend by age during 2005, although during previous years preteens often reported family discord more frequently than their older counterparts. The likelihood of family discord was related to the parental makeup of the household; youths living with their father only were far more likely to report family discord than those in other living situations (78.6 percent versus 50.8 percent). Youth reporting family discord were far more likely than those not reporting discord to be admitted as inpatients (61.3 percent versus 38.7 percent).

School-related problems were cited by one in four (25.8 percent) youth who attempted suicide, but were more common among males, 31.4 percent versus 24.0 percent of females. Typically, younger adolescents are more likely than their older counterparts to cite this as a reason, but during 2005, there was little difference by age group. These types of problems were 75.8 percent more common among Tri-county[4] youth (32.7 percent) than those living elsewhere in Oregon (18.6 percent).

An *argument with a boyfriend or girlfriend* was reported by one in five youth (20.8 percent), making it the third most frequently cited factor. It was somewhat more common among females than males (21.5 percent versus 18.6 percent). As age increased, so did the likelihood of this type of argument precipitating an attempt; just 7.5 percent of preteens reported arguments with their boyfriend/girlfriend compared to 24.9 percent of 15- to 17-year-olds.

Figure 8-8.
Percentage of Attempts Linked to an Argument with a Boyfriend or Girlfriend, by Age, Oregon Minors, 2005



Substance abuse was linked to about one in nine attempts (11.5 percent), but there was a strong gender dichotomy: it was reported twice as often for males than for females (18.0 percent versus 9.5 percent). No attempts involving substance abuse were reported for preteens during 2005. Perhaps surprisingly, youth living east of the Cascades who attempted

suicide were significantly more likely to report substance abuse as a factor (21.9 percent versus 12.5 percent for Tri-county youth and 6.9 percent for youth in other western counties). It was reported about half as often for children living with both parents than those in other living situations (6.8 percent versus 13.1 percent). When substance abuse was reported, 67.5 percent were admitted as inpatients compared to 48.7 percent of those where it was not reported.

Youth citing substance abuse as a factor, by region

Tri-county - 12.5%
Other Western - 6.9%
Eastern - 21.9%

Peer pressure/conflict was cited by about one in 12 adolescents (8.4 percent). Males and females were equally likely to give this as a reason. Youth 14 or younger were somewhat more likely than their older counterparts to cite peer pressure/conflict (10.1 percent versus 7.8 percent). It was reported two to three times as often by Tri-county[4] youth (12.7 percent) than those living in other western counties (4.3 percent) or east of the Cascades (5.5 percent).

Rape or sexual abuse was linked to 7.2 percent of adolescent suicide attempts, but was cited about twice as often by females than males (8.0 percent versus 4.7 percent). It was reported less frequently among 15- to 17-year-olds than younger youth (6.2 percent versus 9.7 percent). Victims of rape/sexual abuse were more likely to have made prior attempts and to have been admitted as an inpatient than those not reporting this factor. (Table 8-15 and Table 8-16). Rape/sexual abuse was reported more than twice as often among Tri-county youth (10.2 percent) than those living elsewhere in Western Oregon (4.6 percent) or east of the Cascade Range (3.6 percent). Children living with both parents were only one-third as likely to report being raped or sexually abused than those in other living situations (2.8 percent versus 9.3 percent).

The *death of a family member or friend* was reported by 5.1 percent of youth who attempted suicide, but was cited more often by males than females (7.0 percent versus 4.5 percent). There was no clear trend by age.

A *move or new school* was a factor in 4.8 percent of the attempts with females reporting this more than twice as often as males (5.6 percent versus 2.3 percent). It was reported more often among preteens than among their older counterparts. When a move or new school was cited as a factor, youth were far more likely to be admitted as an inpatient than those not citing this factor (75.3 percent versus 49.8 percent).

Physical abuse was reported by about one in 25 youth (3.9 percent). There was little difference by gender, but a strong inverse relationship by age: 10.0 percent of preteens reported abuse compared to 6.0 percent of 13- to 14-year-olds and 2.7 percent of 15- to 17-year-olds. Physical and sexual abuse may be much more common than would appear from the hospital

report forms. When responding to statewide surveys, only two-thirds of high school students said they had been neither physically nor sexually abused. Children both physically and sexually abused were 10 times more likely to report having attempted suicide than were nonabused children.[6]

Problems with the law were linked to one in 30 attempts (3.3 percent). Males were far more likely to mention this than were females (8.1 percent versus 1.8 percent). It was reported only among teens, not preteens. As with substance abuse, youth living east of the Cascades more often reported legal problems than did their counterparts west of the Cascades (7.3 percent versus 2.5 percent). The issues were diverse, ranging from the relatively minor to serious, including, for example, marijuana use, forgery, assaulting a youth's own grandmother, and setting a youth's own school on fire.

Suicide by a friend or relative was reported by 1.4 percent of youth as a factor in their own attempts, with little difference by gender and no clear trend by age. Youth reporting this factor were more likely than any others to have made previous attempts and to be admitted as inpatients. (Table 8-15 and Table 8-16).

Pregnancy was a factor in about one in 100 attempts and was cited exclusively by females.

Other reasons not classified above were associated with more than one-third of the attempts (36.6 percent). The reasons were wide-ranging, including parents or grandparents dying from cancer; sexual abuse by a family member who then committed suicide; affected by maternal drug use; having a learning disorder exacerbated by a lack of eyeglasses; being kicked off the football team or cheerleading squad; alcohol and other substance abuse by one or both parents; abandonment by mother; a boy molested by his sister; family members in prison; straight-A student falling behind; mother's affair; lack of friends; deafness; physical handicap; money problems; obesity; death of a pet; intellectual limitations; loss of virginity; sexual identity; abortion; promiscuity; and mother and two sisters shot to death by stepfather.

Same-sex sexual orientation is generally accepted as a related underlying cause of teen suicide. The issue is difficult to study under the current reporting system because of lack of comparison data. Moreover, even if information on sexual orientation were requested on the reporting form, its validity would be highly questionable given the environment in which the information is usually collected; a substantial portion of teens would be unlikely to respond accurately. Nevertheless, the risk is one that health care providers must consider.

Referral

Oregon law requires hospitals that treat an adolescent for a suicide attempt to also refer the adolescent for follow-up care.[7] Nonetheless, hospitals fail to do so 12.7 percent of the time. There was little difference in referral rates by either gender or age. Adolescents treated on an outpatient basis, however, were especially unlikely to receive a referral (17.0 percent versus 9.5 percent of inpatients). Youths living in the Tri-county[4] area were least likely to be referred for follow-up care compared to those living elsewhere (18.0 percent versus 10.6 percent in other western counties and 8.9 percent east of the Cascade Range).

Of the 53 hospitals that reported treating youth for suicide attempts, referrals were made at least 90.0 percent of the time by 36 hospitals; 80.0 percent to 89.0 percent of the time by six hospitals; 70.0 percent to 79.0 percent of the time by two hospitals; 60.0 percent to 69.0 percent of the time by two hospitals; 50.0 percent to 59.0 percent of the time by four hospitals; and, 30.0 percent to 39.0 percent of the time by three hospitals. One-third (32.1 percent) of the hospitals failed to meet the statutory requirement at least 90 percent of the time. The three hospitals with the lowest referral rates were: Good Samaritan (Corvallis), 37.5 percent of 14 youths were referred; Legacy Mount Hood Medical Center, 35.0 percent of 19 youths were referred; and, Tuality Forest Grove Hospital, one of three youths were referred. In the Tri-county area, two hospitals reporting at least 25 attempts, failed to refer youth at least 75.0 percent of the time: Portland Providence Medical Center (35.7 percent of 28 youths were not referred) and Providence St. Vincent Medical Center (25.6 percent of 43 youths were not referred).

Endnotes

1. Moving (rolling) rates are often used when rates are based on rare events that are tracked over time. This method dampens the random statistical variation that occurs when the number of events is relatively small by averaging the data for a group of years. That is, the sum of the deaths for a given period is divided by the sum of the population for the same period. In Figure 8-1, for example, the data point for 2000 consists of a three-year average, 1998-2000. The next data point, for 2001, consists of data for 1999-2001.
2. The following rates were recorded for earlier years: 1989-1991, 15.6 per 100,000 population; 1979-1981, 11.7 per 100,000; 1969-1971, 7.0; and 1959-1961, 2.8.
3. During 1959-1961, the suicide rates were 4.6 per 100,000 for males and 1.0 for females.

4. The Tri-County area consists of Clackamas, Multnomah, and Washington counties.
5. Other living situations include living with Grandparents, Other Relatives, Foster Parents, Friends, or in a Juvenile Facility.
6. Oregon Center for Health Statistics. Suicidal Behavior: A Survey of Oregon High School Students. Health Division. Oregon Department of Human Resources. September 1998. 64 pp.
7. ORS 441.750 states that "Any hospital which treats as a patient a person under 18 years of age because the person has attempted to commit suicide: Shall cause that person to be provided with information and referral to inpatient or outpatient community resources, crisis intervention or appropriate intervention by the patient's attending physician, hospital social work staff or other appropriate staff."