

Youth Suicide Attempts

The risk of suicide increases dramatically during the teen years. During 2003, 922 nonfatal suicide attempts by Oregon youths ages 17 or younger were reported by Oregon hospitals, or about five every two days.

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 Technical Notes section in Appendix B describes the methodology and limitations of the data.

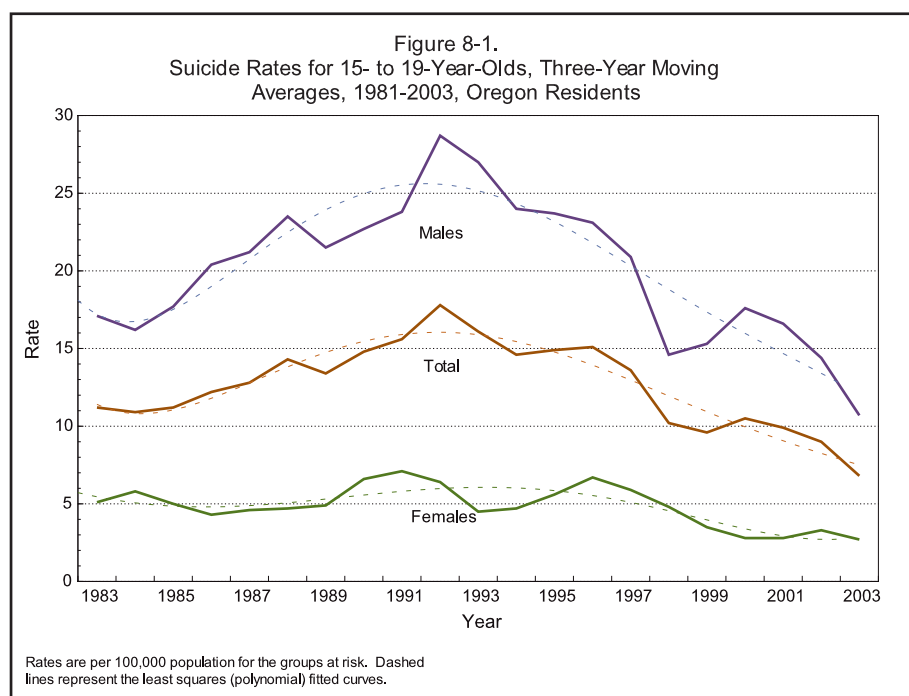
The proportion of adolescents described with a specific characteristic is based on only those cases with known values; that is, attempts in the “not stated” categories are excluded before the percentages are calculated. In most cases this makes relatively little difference in the calculated percentages.

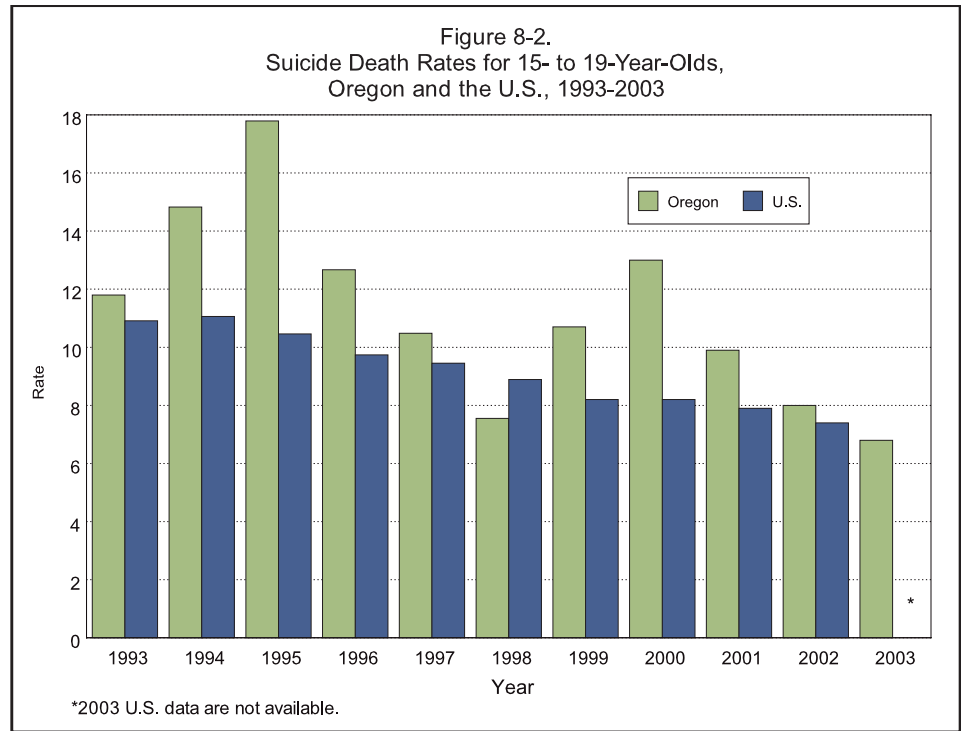
During the past decade, the suicide rate for Oregonians ages 15-19 has fallen to a level not seen since the 1970s.

SUICIDE DEATHS

Temporal Trends

During 2003, 16 Oregonians 19 or younger died by suicide, the smallest number to do so since at least 1979. [Tables 8-1 and 8-2]. Twenty-three died in this manner during 2002. However, because the number of events is small and subject to considerable random statistical variation from year to year, a better measure of the risk of suicide among teens are three-year moving rates,¹ commonly expressed as the number of deaths among 15- to 19-year-olds per 100,000 population. At 6.8 per 100,000 population, the 2001-2003 suicide rate was 24.4 percent lower than the 9.0 recorded during 2000-2002 and the lowest in the last quarter century.





Number of Attempts by Year and Sex			
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

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

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 61.8 percent by 2001-2003. [Figure 8-1]. At its peak during 1990-1992, the suicide rate for males was 28.6 while that for females was 6.4, but by 2001-2003 the rates had fallen to 10.6 and 2.7, 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 has historically been higher than the nation's. [Figure 8-2]. During the three-year period 2000-2002 (the most recent available data), the national suicide death rate for 15- to 19-year-olds was 7.8 per 100,000 population. By comparison, the state's rate was 9.0 per 100,000 population, or 15.4 percent higher. Oregon's rate vis-a-vis other states has declined in recent years, falling to 23rd highest nationally.

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 non-serious attempts.

Data Caveats

The Adolescent Suicide Attempt Data System (ASADS) identifies only those non-fatal attempts among youth 17 or younger who sought care at a hospital and for whom a report was filed. 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 2003 when about three-fourths (77.5%) of all reported attempts were by girls. [Table 8-3].

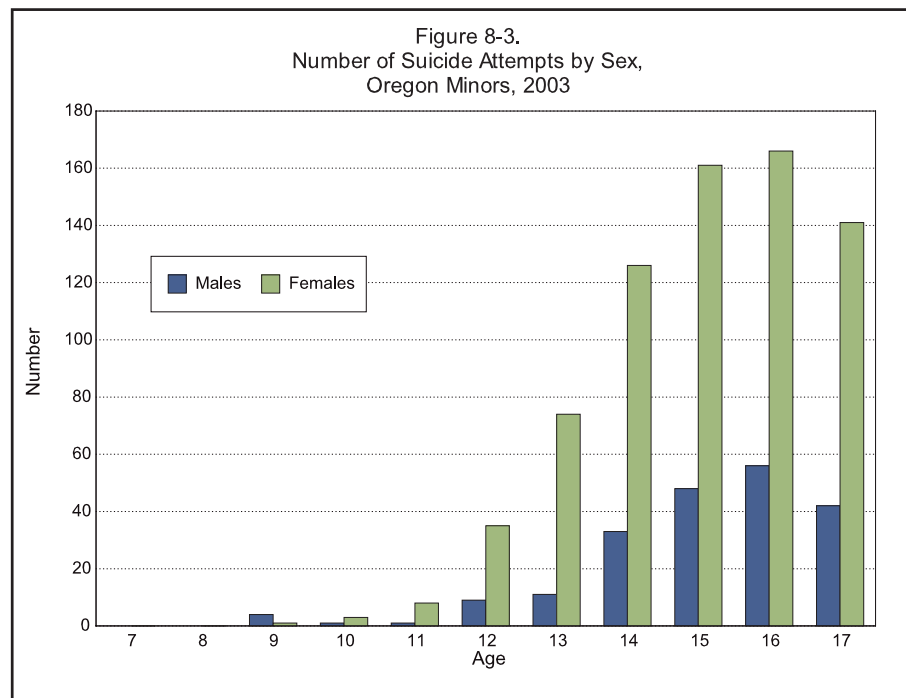
Age

During 2003, seven children under the age of ten attempted suicide, with the youngest a 7-year-old boy. (The youngest child ever reported to have attempted suicide in Oregon was a 5-year-old in 2001.) Sixty-four attempts by preteens were reported. [Table 8-3]. Attempts by 13- and 14-year-olds numbered 244 and those by 15- to 17-year-olds totaled 614. As in years past, 15- to 17-year-olds accounted for two-thirds (66.6%) of all reported attempts. [Figure 8-3].

Race

Reflecting the racial/ethnic composition of the state, most attempts were made by white youth. The ASADS report form allows for multiple races to be reported, as well as Hispanic ethnicity.

Number of Attempts by Age and Sex, 2003			
Age	Total	Male	Female
7	1	1	0
8	1	1	0
9	5	4	1
10	4	1	3
11	9	1	8
12	44	9	35
13	85	11	74
14	159	33	126
15	209	48	161
16	222	56	166
17	183	42	141



Number of Attempts by Race/Ethnicity		
Race	2003	2002
Total	922	876
White	740	761
African American	23	13
Indian	15	11
Chinese	0	0
Japanese	0	1
Asian Indian	1	2
Korean	0	1
Vietnamese	1	1
Other Asian	13	5
Hawaiian	0	0
Samoan	1	0
Other Pacific Islander	0	0
Multiple Races	7	6
Other Races	3	3
Hispanic	59	45
Not Stated	59	27

Hispanics may be of any race; and in the sidebar to the left, Hispanic ethnicity takes precedence over any race.

Household Situation

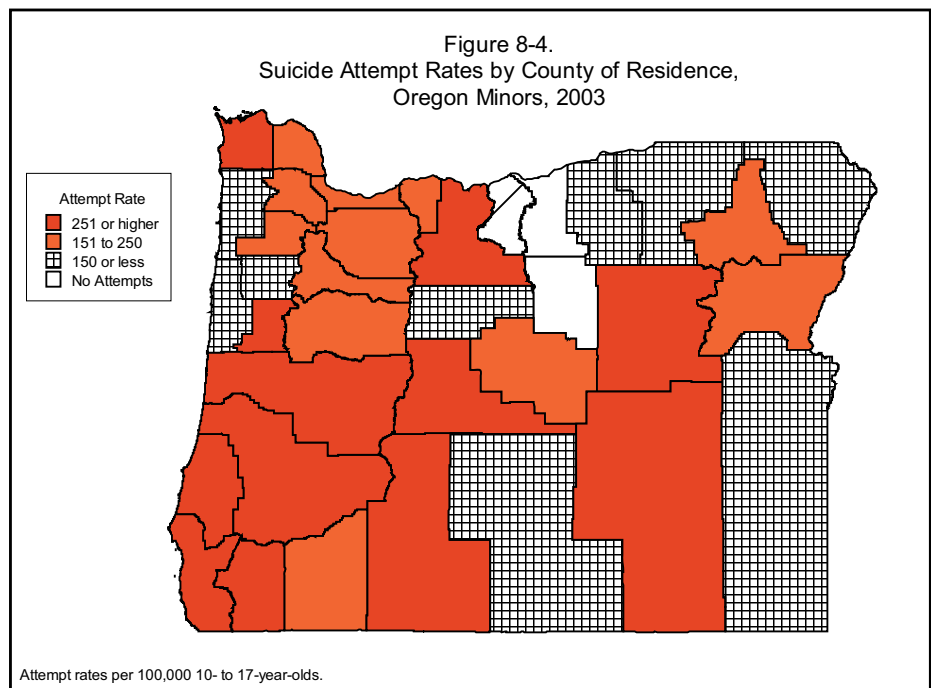
For the first time, among youths reported to have attempted suicide, the largest group (30.0%) lived with their mother only. Ranking a close second were youths living with both parents (27.8%) while a smaller number (15.5%) lived with a parent and stepparent. About four percent of the attempts were made by adolescents living in a juvenile facility. [Table 8-4]. Younger children were more likely to live with their mother only than were their older counterparts; 40.3 percent of preteens did so compared to 27.6 percent of 15- to 17-year-olds.

Geographic Distribution

While the suicide attempt rate for the state was 226.5 per 100,000 (10- to 17-year-olds) during 2003, the rates for individual counties varied widely. [Figure 8-4]. Among counties with 10 or more attempts, the three with the highest rates were: Deschutes, 402.5; Benton, 371.4; and Klamath (345.5). [Table 8-5]. No attempts were reported for adolescents in three counties, all east of the Cascades: Gilliam, Sherman, and Wheeler. Table 8-19 lists the number of attempts reported by individual Oregon hospitals for the past 11 years.

Place of Attempt

Attempts were most commonly made in the adolescent’s own home (77.9%). [Table 8-6]. About one in 25 attempts occurred either in a juvenile facility (4.1%) or on school grounds (3.7%). Females were more likely than males to make an attempt at school, 4.3 percent versus 1.7 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; 19.3 percent of all attempts occurred from June through August compared to 28.3 percent during March through May. About one in four attempts occurred during the fall (25.6%) and winter (26.8%). Typically more attempts occurred on Mondays than any other day of the week, but in 2003 more attempts occurred on Tuesdays (17.9%). By comparison, 11.0 percent of attempts were made on Fridays, the lowest percentage for a weekday. Consistent with prior years, Saturday accounted for the fewest attempts (9.8%). One in eight attempts (12.6%) occurred on Sundays.

Past Attempts

One-half (50.3%) of all attempts were made by youths who had made previous attempts, but females were more likely than males to do so (52.6% versus 42.2%). [Table 8-7]. The youngest child to make repeat attempts was an eight-year-old boy.

Adolescents living east of the Cascade Range were markedly more likely to make repeated attempts than those living in the Tri-County area (Multnomah, Washington, and Clackamas counties). By region, the proportion of repeated attempts were: east of the Cascades, 65.3 percent; Tri-County area, 44.3 percent; other western Oregon, 52.3%.

By living situation, adolescents in juvenile facilities were most likely to have made prior attempts (76.2%), nearly twice the rate of those who lived with both parents (43.7%).

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 given characteristic may be influenced by the repeated attempts of a single individual.

Stated Intent

Four in 10 youths 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 a youth telling another person of his or her plan, but as children aged they were more likely to do so. While 26.7 percent of preteens revealed their plans, 42.2 percent of 15- to 17-year-olds told others of their intent.

In one of every five occurrences (19.1%), youths told their parents of their plan for self-harm prior to doing so. One in eight attempters (13.0%) had told their friends ahead of time. Counselors, teachers, and siblings were also told, but much less frequently. The category "other persons" in Table 8-8 includes grandmothers, neighbors, police, and staff at juvenile and behavioral facilities, among others.

Youths living east of the Cascade Range were more likely to make repeated attempts.

Four in ten youths told another person of their intent to attempt suicide.

Youths living with both parents, a parent and stepparent, foster parents, or their mother were more likely to tell others of their plan to attempt than were youth living with their father or other relatives, 41.3 percent versus 28.3 percent.⁴ About one-third (35.0%) of youths living in juvenile facilities stated they intended to harm themselves prior to doing so.

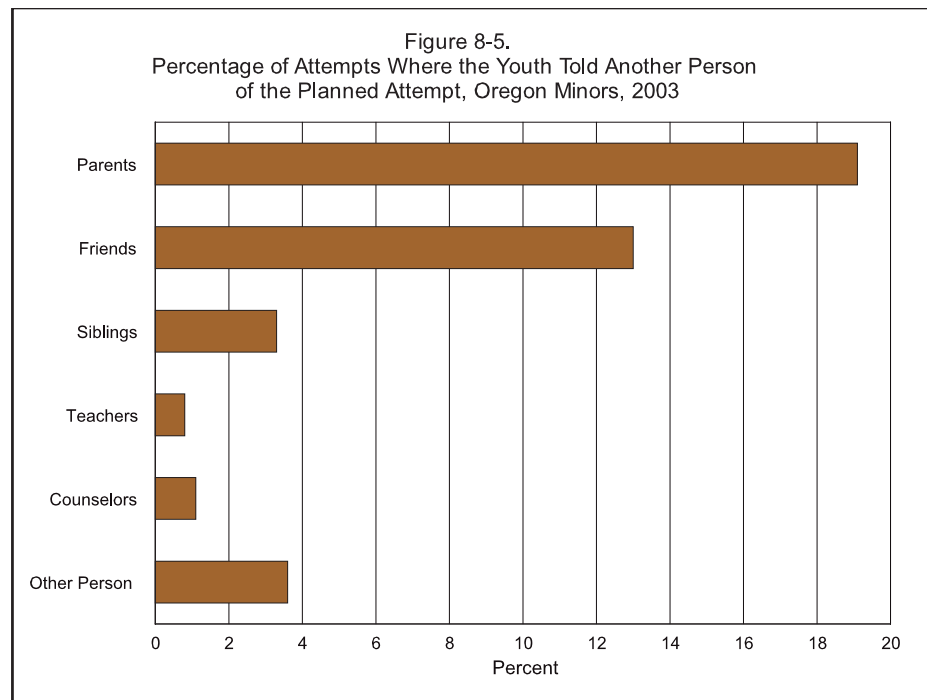
Method

Up to three different methods can be reported for each attempt; however, nearly all attempts (90.7%) involved only one method. Oregon adolescents used a variety of methods in their attempts, but ingestion of drugs alone accounted for the majority (65.1%). Of these, nearly two-thirds involved analgesics. Overall, 20.2 percent of all attempts involved acetaminophen, a substance of particular concern because of its potential lethality and long-term toxic effects, consequences not commonly known by adolescents. Other frequently used drugs included: Advil, Benadryl, Effexor, Motrin, Paxil, Prozac, Trazodone, and Zoloft. Females were more likely than males to ingest drugs, 69.7 percent versus 49.3 percent. There was no clear trend by age.

Cutting and piercing injuries alone ranked second, accounting for 18.8 percent of the cases, nearly all of which were lacerations of the wrists and arms. Knives and razor blades were most commonly used. Males used this method more often than females (23.2% versus 17.5%). There was no clear trend by age.

Hanging and suffocation alone ranked third and was used by 3.1 percent of youths attempting suicide; males were three times more likely than females to use this method (6.8% versus 2.1%)

***Drugs were used
in two of every three
attempts.***



and preteens more than 12 times as likely as teens (18.8% versus 1.5%). Attempts involving hanging and/or suffocation are second only to gunshots in the risk of death.

Ranking fourth, at 1.4 percent, was ingestion of substances other than drugs. Among those used were: bleach, cleanser, lighter fluid, Windex, stain remover, boric acid, plant food, and talcum powder.

About one in 11 (9.3%) of the attempts involved multiple methods, most commonly drugs combined with other substances (3.4%) and drugs/other substances combined with cutting or piercing injuries (3.1%). Males were somewhat more likely than females to use multiple methods (12.2% versus 8.5%).

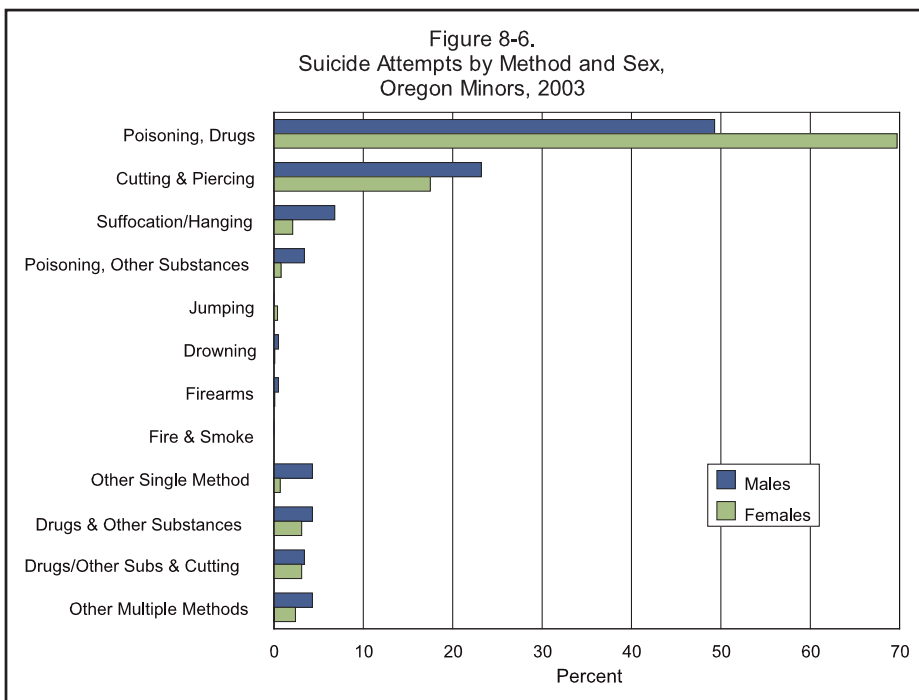
The categories “other single method” and “other multiple methods” in Table 8-9 include actions such as electric shock, crashing a motor vehicle at high speed, and jumping into moving traffic or from a multistory building. Two individuals survived gunshot wounds, one of whom was reportedly playing Russian roulette.

Table 8-10 shows that youths making repeated attempts were more likely to use more violent methods (although not necessarily more lethal methods). They were also somewhat more likely to use multiple methods. Cutting/piercing and hanging/suffocation were both more often used by those who had made prior attempts.

Hospital Admissions Status

About one-half (51.7%) of all adolescents who attempted suicide were admitted by hospitals as inpatients. Reflecting their propensity to use more violent/lethal methods, males were more likely to be admitted as inpatients, 58.5 percent versus 49.8 percent of females. Older youths were somewhat more likely than their younger counterparts to be admitted. [Table 8-11].

As the number of risk factors increased, so did the likelihood of admission as an inpatient.



Among the single categories with at least 10 attempts reported, those who used “other” single methods were most likely to be admitted (71.4%) while those with cutting/piercing injuries were least likely (42.2%).

Youths living east of the Cascades were only about one-half as likely to be admitted to the hospital as were those residing in the Tri-County area, 34.9 percent versus 62.3 percent. About half (48.9%) of the youths living in other western Oregon counties were admitted as inpatients. Adolescents living with a parent and stepparent were more likely than those living with both natural parents to be treated as an inpatient (63.2% versus 53.1%).

Psychological Conditions

About eight in 10 (83.3%) youths, who intentionally injured themselves, were reported to be suffering one or more psychological conditions. By far, the most commonly reported condition was major depression (56.5%). There was little difference between the genders in the prevalence of depression, but it was more often diagnosed among older youths, increasing from 43.3 percent among preteens to 58.6 percent among 15- to 17-year-olds.

Other disorders were much less frequently reported, with attention deficit hyperactivity disorder (ADHD) ranking a distant second at 10.2 percent. ADHD was reported about three times as often among males as females (21.7% versus 7.0%) and a little more than twice as often among preteens than 15- to 17-year-olds, (20.0% versus 8.6%). It was diagnosed about twice as often among Tri-County youths as among those residing east of the Cascade Range, 11.8 percent versus 5.3 percent. The diagnosis was made among 8.4 percent of youths living in western Oregon (excluding the Tri-County area).

Other conditions reported among at least one in 20 adolescents who attempted to harm themselves were: conduct disorder (8.9%), bipolar disorder (8.1%), post-traumatic stress disorder (8.1%), and adjustment disorder (7.6%). Besides the disorders shown in Table 8-13, other recurring diagnoses included: anxiety, borderline personality disorder, obsessive-compulsive disorder and oppositional defiant disorder. Other notable conditions included: agoraphobia, Asperger’s syndrome, autism, fetal alcohol syndrome, mental retardation, multiple personalities, seasonal affective disorder, and unresolved grief.

The proportion of youth with reported psychological conditions varied by their home living situation. While 81.7 percent of those living with both parents were reported to have mental disorders, 94.4 percent of those living with foster parents were so affected.

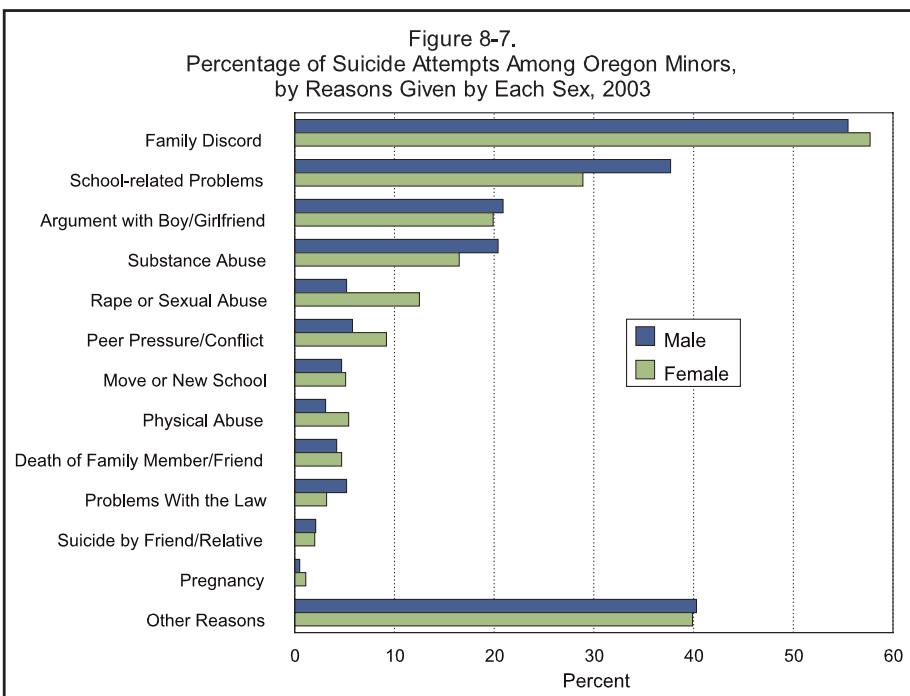
Recent Personal Events

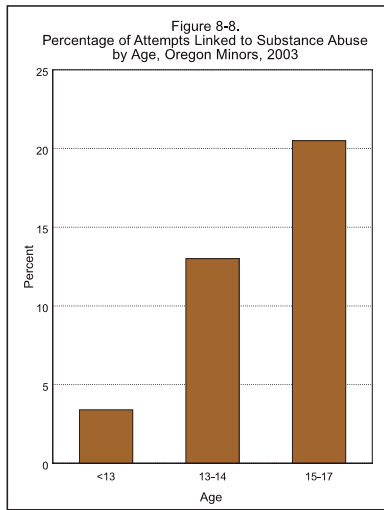
Suicidal behavior is a consequence of a complex interaction of factors, not a single event, although a single event may act as a trigger. [Figure 8-7]. The report form allows for one or more events leading to the attempt to be recorded; for example, one 15-year-old girl experienced family discord, school difficulties, a kidney transplant leading to obesity, and rape by three young men. Oregon minors experiencing a large number of stressors were more likely to use more lethal methods in their suicide attempt; while 9.3 percent of youths who used drugs reported four or more precipitating events, 24.1 percent of youths attempting to hang or suffocate themselves did so.

As the number of stressors increased, so did the likelihood of certain behavioral/psychological conditions; for example, 5.0 percent of adolescents with one identified stressor were diagnosed with conduct disorder compared to 6.3 percent of those with two, 9.7 percent of those with three, and 24.3 percent of those with four or more.

Lack of social support is a common thread among adolescents who attempted suicide, especially among those who cite multiple reasons. Fewer than one in three of these youths were living with both parents. Children living with a parent and stepparent were more likely to report multiple factors; 65.4 percent cited two or more reasons compared to 53.1 percent of those living with both natural parents. The most commonly reported reasons follow in order by frequency:

Family discord was the most common factor reported.





Family discord was, by far, the most common factor associated with a suicide attempt. More than half (57.2%) of Oregon minors reported discord as a precipitating event. [Table 8-14]. There was little difference between the sexes in the risk of family discord and no clear trend by age. The situation was reported most often by children living with their father only (78.9%) or a parent and stepparent (72.3%). By comparison, family discord was reported by 49.6 percent of those living with both parents.

School-related problems were cited by three in 10 (30.8%) youths who attempted suicide, but were more common among males than females (37.7% versus 28.9%). There was an inverse relationship between the prevalence of school-related problems and the age of the youth, with 43.1 percent of preteens reporting problems compared to 27.6 percent of 15- to 17-year-olds. Adolescents living in the Tri-County area were most apt to report school-related problems; 41.5 percent did so compared to 20.9 percent of those in other western Oregon counties and 24.5 percent of those living east of the Cascade Range.

An **argument with a boyfriend or girlfriend** was the third most common reason given by youth (20.2%). There was little difference by gender, but older youth were much more likely to cite this as a factor than were their younger counterparts (3.4% of preteens versus 24.0% of 15- to 17-year-olds).

Substance abuse was linked to about one in six (17.4%) attempts, with males a little more likely to report this than females (20.4% versus 16.5%). Substance abuse was an increasingly important factor among older youth; while 3.4 percent of preteens reported it, 13.0 percent of 13- and 14-year-olds and 20.5 percent of 15- to 17-year-olds did so. It was cited by 27.0 percent of youths living east of the Cascades compared to 10.8 percent of Tri-County youths and 18.0 percent of other western Oregon youths.

Rape and/or sexual abuse was linked to 10.9 percent of adolescent suicide attempts, but was cited more than twice as often by females than males (12.5% versus 5.2%). It was slightly more common among preteens than older children and was reported to start as early as age four.

Peer pressure/conflict was a risk factor for one in 12 children, but posed a greater risk to females who cited it almost twice as often as males (9.2% versus 5.8%). It was less common among 15- to 17-year-olds than younger youths. Peer pressure was reported far more often among Tri-County youths than those living elsewhere, 14.4 percent versus 4.5 percent of other western Oregon youths and 2.7 percent of those living east of the Cascades.

A **move or new school** was a factor in 5.0 percent of adolescent suicide attempts. There was little difference by gender and no clear trend by age, but it was more likely to be a factor in the suicide attempts of Tri-County youth than others, 6.9 percent versus 3.5 percent.

Physical abuse, too, was cited by about one in 20 children who attempted suicide with females more likely to do so than males (5.4% versus 3.1%). It was more often a precipitating factor among preteens than 15- to 17-year-olds (8.6% versus 4.0%). Reports of physical abuse occurred more often among Tri-County adolescents (6.9%) than those living in other western Oregon counties (2.8%) or east of the Cascades (4.8%).

The **death of a family member or friend** was reported by 4.6 percent of youths who attempted suicide. There was little difference in the prevalence of this factor by gender, but as age increased so did the percentage of youths who cited the death of a family member or friend (1.7% of preteens versus 5.2% of 15- to 17-year-olds).

Problems with the law were reported by fewer adolescents than in preceding years, with just 3.6 percent doing so in 2003. Males were more likely to report this than females (5.2% versus 3.2%) and older youth than younger; no preteen youth cited difficulties with the law. Illegal activities ranged from shoplifting to burglary, assault, arson and sex abuse.

Suicide by a friend or relative was a trigger among one in 50 youths who attempted suicide. Males and females were equally likely to report this as a precipitating factor and older youth more likely than their younger counterparts.

Pregnancy was given as a reason by about one in 100 adolescents who committed self-harm. It was reported by just one male and no preteens.

Other risk factors were commonly reported, with two of every five youths doing so. Among these were: refusal by a biological father to see his child, alcohol and drug abusing parents, being unable to live up to parents' expectations, chronic pain, death of a pet cat, mentally ill parents, epilepsy, facial disfigurement due to burn scarring, failure to be retained in foster homes, family financial difficulties including eviction, infection with sexually transmitted diseases, feeling unloved by parents, a hearing impairment, enuresis, obesity, loss of visitation rights with child, homicidal threats by parent, inability to find a job, rejection by parents due to sexual orientation, fleeing the scene of a motor vehicle accident, promiscuity and low self-worth, and wanting to see if parents loved her.

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 a lack of comparison data. Moreover, even if information on sexual orientation were requested on the reporting form, it's validity would be highly questionable given the environment in which the information is usually collected; a substantial portion of the teens would be unlikely to respond accurately. Nevertheless, the risk is one that health-care providers must consider.

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: 1979-1981, 11.7; 1969-1971, 7.0; and 1959-1969, 2.8.
- 3 During 1959-1961, the suicide death rates were 4.6 per 100,000 for males and 1.0 for females.
- 4 Among living situations reported by at least 10 youths.