

Adolescent Suicide Attempts

INTRODUCTION

During 1997, 31 of Oregon's youth (under age 20) committed suicide, the smallest number since 1989. The youngest were two 12-year-olds, a boy and girl, both of whom hanged themselves. At the same time, no fewer than 736 non-fatal suicide attempts were made by Oregon adolescents.

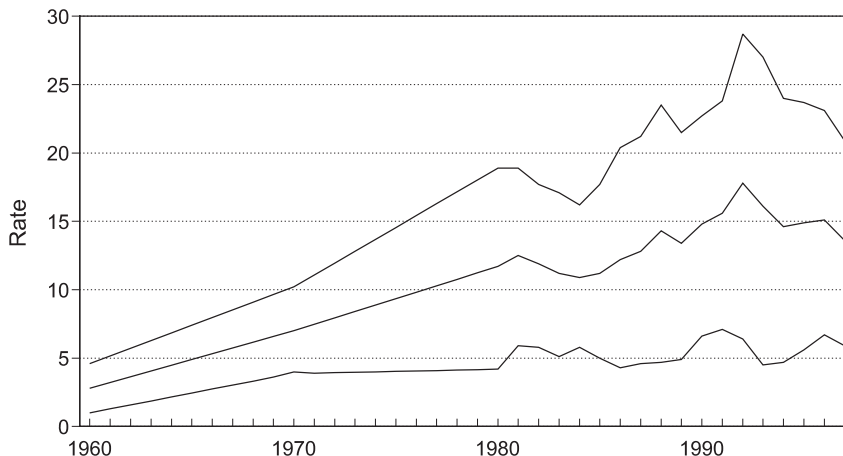
Suicide by adolescents has caused increasing concern both nationally and in Oregon. In 1987, the Oregon legislature created a law (ORS 441.750) mandating that hospitals treating a child age 17 or younger for injuries resulting from a suicide attempt report the attempt to the Oregon Health Division. The law became effective in January 1988; it also requires that the patient be referred for counseling.

During 1995-1997 the suicide rate for Oregonians 15-19 years old was five times higher than during 1959-1961.

SUICIDE TRENDS

During the 1960s, '70s, and '80s, the suicide death rate rose dramatically, especially among males. However, since the early 1990s the rate has trended downward, perhaps signaling a cessation of the long-term upward trend. Nonetheless, during 1995-1997, Oregonians 15-19 years old were 4.9 times more likely to commit suicide than were their counterparts during 1959-1961. The suicide death rate among males increased over that time from 4.6 to 20.9 per 100,000; among females, it increased from 1.0 to 5.9. For both sexes combined, the rate increased from 2.8 to 13.6. However, these

Figure 8-1.
Suicide Rates for 15- to 19-Year-Olds, 1959-61,
1969-71, 1979-81, and Three-Year Moving
Averages, 1981-97, Oregon Residents



Note: Because population data by age and sex are not available for the 1960s and 1970s, rates for these years, other than those based on decennial census data, have been interpolated. Therefore, variations within 10-year periods prior to 1980 are not apparent. Rates are per 100,000 population for the groups at risk.

Number of Attempts by Year and Sex			
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

Attempters of unknown sex are included in the total.

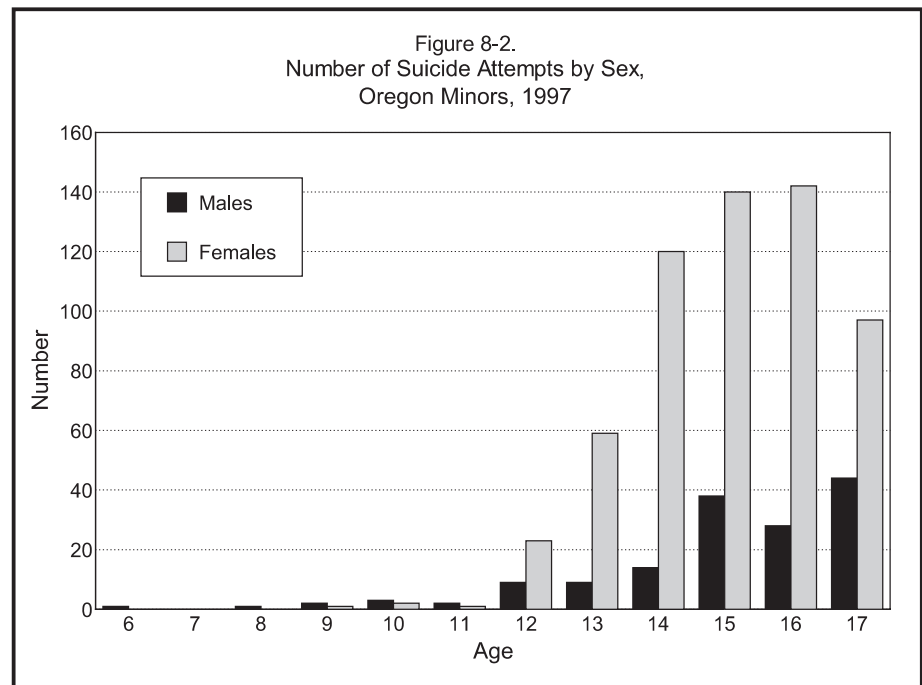
rates are based on relatively few events and therefore subject to considerable random statistical variation. This is especially true of the rates for females. Figure 8-1 illustrates the variable nature of suicide rates for 15-19 year old Oregonians during recent years.

SUICIDE ATTEMPT TRENDS

Paralleling the decline seen in the number of fatal suicide attempts, was the drop in reported non-fatal attempts. During 1997, 736 attempts by minors were reported to the Health Division, down from 778 reported the previous year.

The Oregon system identifies only attempters with injuries severe enough to require emergency care at a hospital; consequently, the number of events reported must be considered a minimum. Additionally, not all attempts that should have been reported by hospitals actually were; some large hospitals are known to substantially under-report the number of events. [Table 8-20]. The magnitude of the undercount is, unfortunately, not known. The Technical Notes section in Appendix B describes the methodology and limitations of the data.

Unlike previous years, the proportion of attempters described with a specified 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, the difference in the calculated percentage between this new methodology and the previous is negli-



gible, but others (e.g., number of attempts) show a more substantial difference.

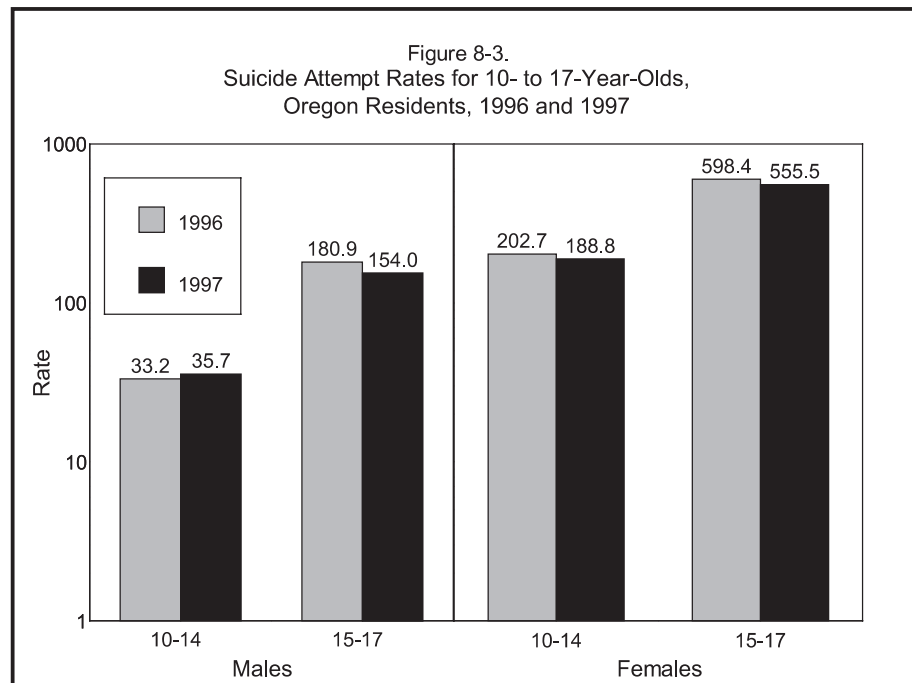
AGE

The youngest child to attempt suicide was just six years old, a boy who was motivated by family discord; he had made previous attempts. Forty-five attempts by preteens were reported, seven fewer than the previous year. Attempts by 15- to 17-year-olds decreased 5.4 percent. As in years past, 15- to 17-year-olds accounted for two-thirds (66%) of all attempts among Oregon minors. [Figure 8-2].

SEX

Girls were far more likely to attempt suicide than were boys; four-fifths (80%) of all attempts were by girls. [Table 8-2]. The sex- and age-specific attempt rates declined for all groups except for a marginal increase among 10-14 year old boys.

Although girls more often made attempts, attempts by males more often resulted in death, a consequence of their using more lethal methods. During 1997, the completion rate for males less than 18 years of age was 6.6 percent compared to just 1.4 percent for females in this age group. Overall, 2.4 percent of the reported attempts ended in death. Two-thirds (68%) of suicides by teens and preteens during 1997 were committed by males.



Number of Attempts		
Race	1996	1997
White	659	651
African American	20	17
Indian	9	12
Chinese	0	0
Japanese	0	0
Hawaiian	0	0
Filipino	0	0
Other Asian and Pacific Islanders	13	11
Hispanic	29	31
Not Stated	48	14

Children living with a parent and stepparent were most likely to give multiple reasons for their attempts.

RACE

The number of suicide attempts by race/ethnicity are shown in the sidebar to the left. Reflecting the racial/ethnic composition of the state, most attempters were white, but marked differences in suicide death rates have been recorded between the races (See the report, *Multicultural Health: Mortality Patterns by Race and Ethnicity, Oregon, 1986-1994.*)

HOUSEHOLD SITUATION

One-third of attempters lived with both parents (33%). Ranking second were attempters who lived with their mother only (28%) while 16 percent lived with a parent and stepparent. Just 3.2 percent lived with their father only. [Table 8-3]. Those who lived with a parent and stepparent more often cited three or more reasons for their attempted suicide, 29 percent did so versus 14 percent in all other living situations. Adolescents living under government supervision were most likely to have made prior attempts; 75 percent had done so.

GEOGRAPHIC DISTRIBUTION

While the suicide attempt rate for the state was 202.4 per 100,000 (10- to 17-year-olds), the rates for individual counties were highly variable. [Figure 8-4.]. During 1997, among counties with ten or more attempts, the three highest rates were reported from Douglas (396.1), Marion (335.5) and Klamath (333.9) counties. In five counties no attempts were reported; all were east of the Cascade Range and had small populations.

[Table 8-4]. Some counties with larger populations reported few attempts, suggesting that not all hospitals are complying with the law, or that adolescent attempters in rural areas may be treated in clinics or doctors' offices (in which case attempt reporting is not required). Table 8-20 lists the number of reports by hospital since reporting became mandatory in 1988. The report *Suicidal Behavior: A Survey of Oregon High School Students, 1997*, lists suicide death rates by county.

PLACE OF ATTEMPT

Most (83%) of the attempts were made in the adolescent's own home while 5.8 percent were made in another's home. [Table 8-5]. Schools were the site of just 2.7 percent of the attempts; all but two of the attempts there were by girls.

MONTH AND DAY OF ATTEMPT

As in past years, the summer school vacation months continued to be the season of lowest risk. Eighteen percent of the suicide attempts occurred from June through August, but departing from the usual pattern of increased suicidal behavior during the spring months, attempts were most common during the fall (29%). By day of the week, suicide attempts occurred least often on Saturdays (10% of all attempts) and most often on Mondays (18%).

Suicide attempts were made most often on Mondays.

REPEAT ATTEMPTS

Almost half (45%) of all attempts were by adolescents who were reported to have made prior attempts during the previous five years. Girls were more likely to have made prior attempts; 47 percent had done so compared to 39 percent of boys. [Table 8-6]. Because a single adolescent may make multiple attempts during any one year, it should be remembered that references to the number or proportion of attempters with a given characteristic may be influenced by repeated attempts of a single individual.

METHOD

Adolescents used many methods in their attempts, but ingestion of drugs accounted for the vast majority (71%). Two-fifths (43%) of the 522 drug-related cases involved analgesics; aspirin and acetaminophen were most commonly used. (The latter is of particular concern because many adolescents are unaware of its potential long-term toxic effects and lethality.) Most of the other attempts involving drugs (179) were with combinations of drugs or of drugs with alcohol. Cutting and piercing injuries were the second most common method of attempt, accounting for 13 percent of the cases; nearly all of

Seven of every ten attempts were made with drugs.

Six of every ten suicides were committed with guns.

these were lacerations of the wrists. The third single most common method was suffocation and hanging (3.8%). The category "other" in Table 8-7 includes mostly attempts by multiple methods; the majority involved poisoning, usually with drugs, combined with laceration of the wrists. Uncommon methods, such as swallowing glass fragments, are also included here.

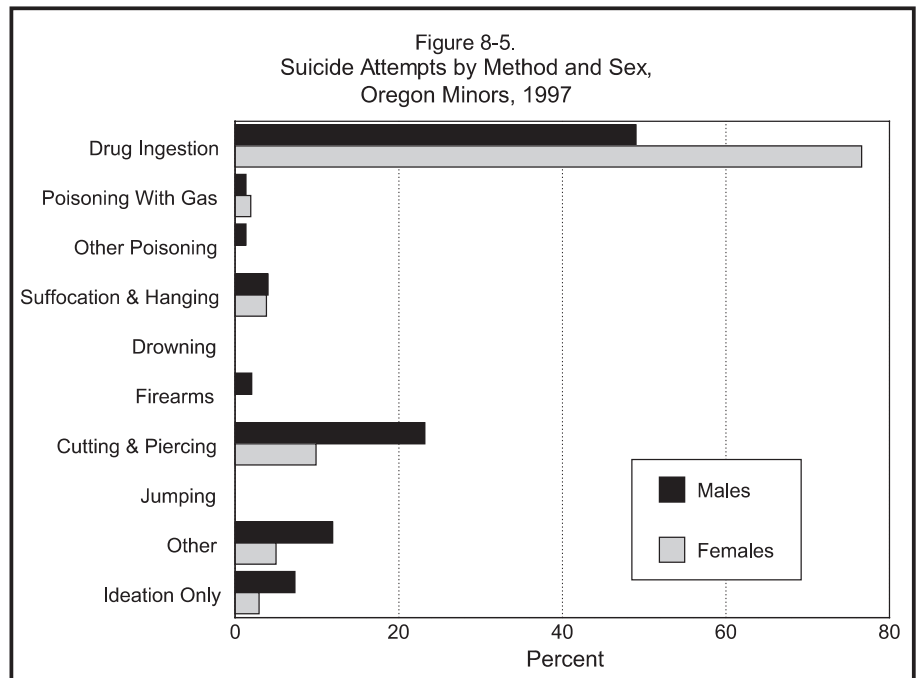
The method chosen varied with the sex of the attempter. [Table. 8-7]. Three-quarters (77%) of the attempts by girls involved drugs compared to one-half (49%) of those by boys. [Figure 8-5]. Boys were more likely than girls to inflict cutting/piercing injuries, 23.2 percent compared to 9.9 percent. Boys were also more likely than girls to choose "other" methods, 11.9 percent versus 5.0 percent.

As with gender, the method varied with the age of the attempter. Preteens were more likely than older youth to attempt to suffocate/hang themselves while poisoning with drugs increased marginally with age.

Regionally, adolescents living in the tri-county area were most apt to use poisons in their attempts while attempters living elsewhere in western Oregon were more likely than others to attempt to suffocate/hang themselves. Youth living east of the Cascade Range were more likely to choose cutting/piercing as their method of attempt than were other Oregon youth. [Table 8-9].

Adolescents making their first attempt were more likely to ingest drugs compared to those making a repeat attempt, 79

Percentage of attempts with guns that were fatal: 87



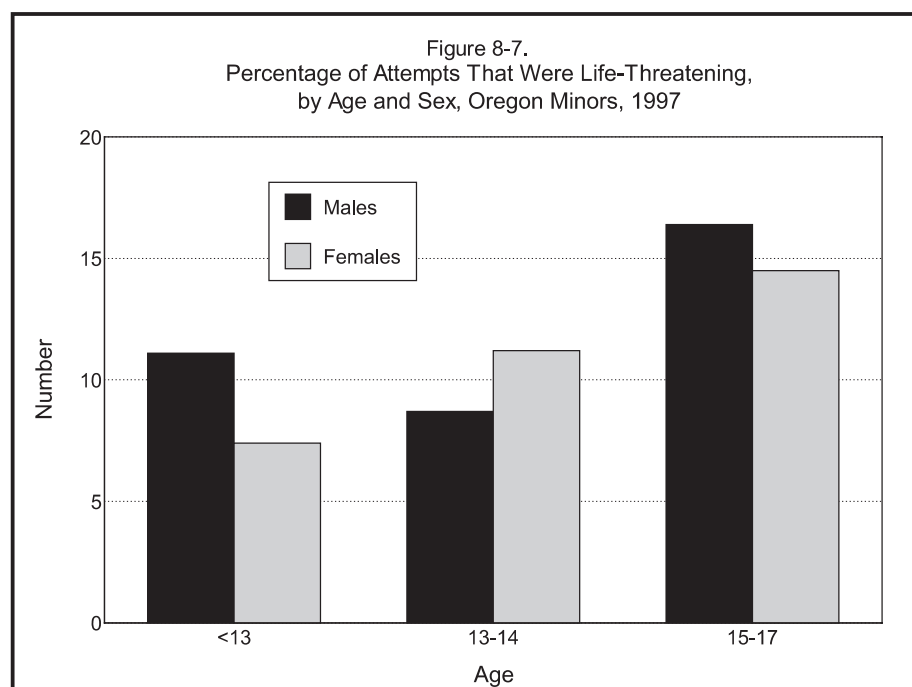
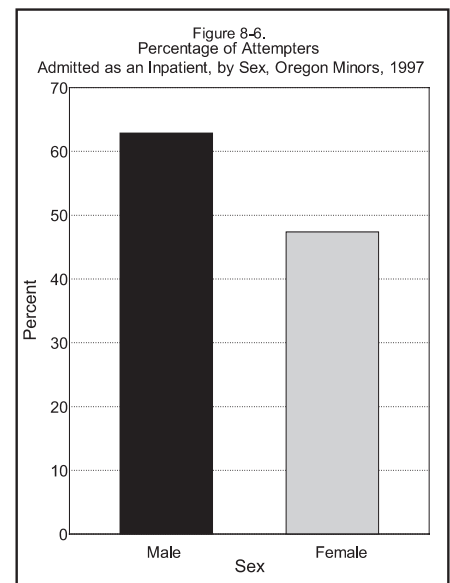
percent compared to 62 percent. [Table 8-10]. Suffocation and hanging, a more lethal method, was used nine times as often by repeat attempters than by those making their initial attempt (8.9% vs. 1.0%).

Although most attempts involved ingestion of drugs, they only infrequently resulted in death. Conversely, the highest proportion of attempts made by adolescents that resulted in death involved firearms. During 1997, 65 percent of all completed suicides by Oregonians teenaged or younger were committed with guns (most were handguns). Only three attempts with a firearm did not result in death. For a discussion of the lethality of attempt methods, see *Suicidal Behavior: A Survey of Oregon High School Students, 1997*.

PATIENT STATUS

One-half of reported attempts (51%) were of such seriousness that the attempter was hospitalized; this figure includes attempters who were transferred to another institution for specialized care. [Table 8-11]. Males were more likely to be admitted as in-patients, 63 percent compared to 47 percent of females. Three-fourths of the in-patients had inflicted injuries that were definitely or possibly life-threatening.

Certain methods were more likely than others to result in hospitalization. Of the categories with at least ten events, attempts involving hanging/suffocation and cutting/piercing both resulted in 57 percent of the attempters requiring inpatient care. [Table 8-12]. By comparison, 39 percent of the attempts involving poisoning with solids or liquids led to



hospitalization. Almost six in ten (55%) of the "other" cases required hospitalization. These most often involved poisoning in combination with lacerations. Also included in this category are other potentially lethal methods such as running in front of traffic. Most adolescents who attempted suicide with a gun died before reaching a hospital.

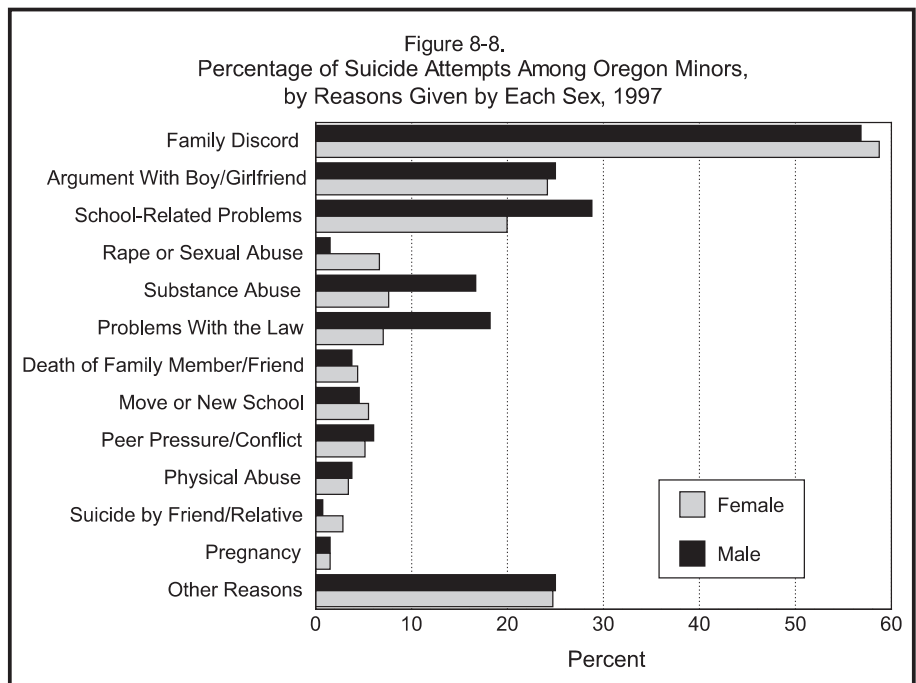
Over one-half of all attempts were potentially life-threatening.

SEVERITY OF INJURIES

One in seven (14%) of the attempts were definitely life-threatening; another 41 percent were possibly life-threatening. Attempts by boys, especially preteens, were more often definitely/probably life-threatening; 72 percent of their injuries were potentially fatal compared to 33 percent of similarly-aged females. [Table 8-13]. Some attempt methods were clearly riskier than others. Among those attempters who survived long enough to receive hospital care, "other" attempts proved most dangerous (among the methods with at least 10 attempts); most of these involved both lacerations and poisoning. However, most fatal attempts were made with guns and death occurred before the adolescent could be transported to the hospital. Poisonings with solids/liquids were least likely to be life-threatening. [Table 8-14].

SUICIDAL INTENT

Not all suicide attempts were made with death as a goal. Some may have been made with a desire to resolve a difficult conflict, indicate an intolerable living situation, or elicit sympathy or guilt.



Health care providers were uncertain about the attempter's intent in half the cases, so the figures reported here may understate the proportion of adolescents whose goal was death. The true figure may lie between the reported 18 percent and an adjusted figure of 36 percent (assuming the intent of all attempters was equivalent to those with a stated intent -- an assumption of unknown validity). The following discussion is based on all reported attempters, so the figures represent the minimum number of adolescents who sought death through suicide.

Although males outnumbered females in the number of successful attempts, health care providers reported little difference by gender in the proportion who were believed to have had death as a goal: males were more apt to use lethal methods. [Table 8-15].

Among the methods with at least 10 attempts, attempters who used "other" methods were most likely to have had death as a goal. [Table 8-16] Those attempters inflicting cutting injuries were least likely to have tried to kill themselves. Some adolescents misjudged the potential lethality of the method they used; one-quarter of those who did not attempt to kill themselves made attempts that possibly or certainly put their lives at risk while 6.1 percent of attempters whose goal was death did not use life-threatening means.

The number of previous attempts was linked to the adolescents' intent; while 17 percent of those who had not made a prior attempt sought death, 21 percent of those who had made prior attempts did so.

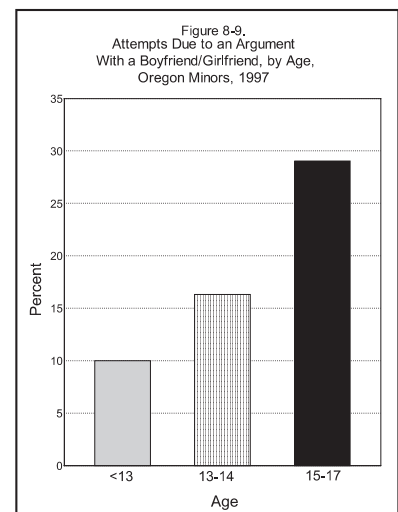
Attempters who reportedly tried to kill themselves were most likely to be admitted as inpatients: 71 percent compared to 46 percent of suicide ideators and 25 percent of those who did not attempt to kill themselves. (Suicide ideation is the expression of suicidal thought; no actual attempt is made.)

RECENT PERSONAL EVENTS

A suicide attempt may be triggered by a variety of personal crises. The report form allows one or more events leading to the attempt to be recorded.

Lack of social supports is a common thread among adolescents who attempt suicide, especially those who cite multiple reasons. One 14 year old girl reported being raped, breaking up with her boyfriend, living amidst family discord, and having a mother who was a prostitute. Fewer than one in three of all attempters lived with both natural parents. The most commonly reported reasons follow in order of frequency:

Family discord was the most common cause of attempted suicide. Nearly six in ten (58%) of Oregon minors said this



Half of all attempters who reported sexual abuse/rape had made previous attempts.

prompted their attempts. [Table 8-17]. It was mentioned most often by preteens. Children attempting suicide who lived with a parent and stepparent were more likely to report family discord than those living with both natural parents, 75 percent compared to 51 percent. Family discord was mentioned by 87 percent of African-Americans, and 75 percent of Hispanics, the highest proportions by race; 58 percent of whites said discord was a cause.

An argument or breakup with a boyfriend or girlfriend was the second leading cause (24%). Older attempters were far more likely to give this as a reason than were their younger counterparts, but there was relatively little difference by gender. [Figure 8-9]. Asian and Pacific Islander youth were nearly twice as likely to inflict self-harm for this reason than were other racial/ethnic groups (46 percent vs. 24 percent).

School-related problems (e.g., performance, truancy) were cited by one in five (22%) attempters. Boys were almost half again as likely to report school-related problems than were girls, 29 percent compared to 20 percent. The second most common reason for an attempt among preteens, the importance of this factor diminished with increasing age. Tri-county youth mentioned this almost twice as often as others in western Oregon. Not surprisingly, school-related problems were least frequently reported during June through August.

Substance abuse was linked to 9.4 percent of the attempts and it was listed over twice as often by males as by females (16.7% vs. 7.6%). Two-thirds of the youth attempting suicide for this reason inflicted injuries that were definitely or possibly life-threatening, the highest proportion among the reasons discussed here. Sixty-nine percent of attempters mentioning substance abuse were treated as in-patients, the second highest proportion by reason. Only attempters citing physical abuse were more likely to have made prior attempts (45% vs. 44%). Substance abuse was most common (by living situation) among attempters who were homeless (40%) or lived with friends (20%); just 4.7 percent of attempters living with both natural parents reported substance abuse. Barbiturates, alcohol, and marijuana were most often mentioned. Attempters living in the Portland tri-county area were more likely to mention substance abuse than were those living elsewhere in Oregon, 9.6 percent versus 6.4 percent.

Encounters with the legal system were mentioned by 9.3 percent of the attempters. Shoplifting was most common, but also reported were assaults on parents and grandparents, prostitution, and hit and run. Males were twice as likely to attempt suicide for this reason, as were youth living east of the Cascades (compared to tri-county youth). This attempt reason

was least often associated with injuries that were definitely life-threatening.

Sexual abuse or rape was cited by 5.6 percent of the attempters, and was reported more than three times as often by females than males, 6.7 percent versus 1.5 percent. Fifty-one percent of attempters reporting sexual abuse or rape had made previous attempts, the second highest proportion among the reasons. Seventy-three percent were admitted as inpatients, again the second highest proportion by a reason. Most often, the rape or sexual abuse was reportedly committed by fathers and step-fathers. However, also included in this category are two attempts by girls who were trying to become pregnant with older men (who were subsequently charged with statutory rape). The youngest was a 13-year-old involved with a 35 year old man.

A move or attendance at a new school was cited by 5.3 percent of the attempters, with females somewhat more likely to do so than males, 5.5 percent versus 4.5 percent. Preteens were twice as likely as teens to report this as the cause of their attempt.

Peer pressure or conflict was identified as a the cause by 5.3 percent of attempters, and was cited more often by males and preteens. Peer pressure was more common among youth living east of the Cascades (8.5%) than those west of the Cascades (3.8%).

The death of a family member or friend prompted 4.3 percent of the attempts. Females were a little more likely to state that this was a reason for their attempt. Although just 19 of youth who cited death of a family member or friend had made a previous attempt (the lowest proportion by reason), these attempters were most likely to be admitted to a hospital as an inpatient (75%).

Physical abuse was reported in 3.5 percent of the attempts. Preteens gave this as a reason six to seven times more often than older attempters. Physically abused children were most likely to have made repeated attempts (45% vs. 29% making attempts for other reasons), and also more likely to be admitted as in-patients (70% versus 45% for all other reasons). [Table 8-19].

A suicide or attempted suicide by a family member or friend prompted 2.4 percent of the attempts. Female attempters reported this as a reason more often than males. Youth who attempted suicide because a friend or family member had done so were also most likely to have inflicted injuries that were definitely life-threatening. [Table 8-18].

Concern about pregnancy prompted 1.5 percent of the attempts. With the exception of two males who were the

***Suicide by a friend/
relative, substance
abuse, and peer
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partners of pregnant females, all of the attempters were female and all but one were 13 or older.

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, its validity would be highly questionable; many teens would be unlikely to respond truthfully, if at all. Nevertheless, the risk is one that health care providers must consider.

Other reasons given included: gang involvement, parental drug abuse, employment problems, abandonment, illness of family members or self, and eviction. The likelihood that a youth sought death was highest among attempters who gave multiple reasons, particularly those who cited four or more reasons.

CONCLUSIONS

Although the teen suicide rate is not as high as the rates for most older Oregonians, it is substantially higher than it was several decades ago. Health care professionals, parents, teachers, law enforcement officials and others need to be aware that the changing social milieu has prompted more adolescents to consider suicide as an option than did so a generation ago. Without intervention, a failed suicide attempt may be followed by an attempt that results in death.

