

Adolescent Suicide Attempts

INTRODUCTION

During 1998, 26 of Oregon's youth (under age 20) committed suicide, the smallest number since 1989. The youngest was an 11 year old boy who hanged himself. At the same time, no fewer than 761 non-fatal suicide attempts were made by Oregon adolescents.

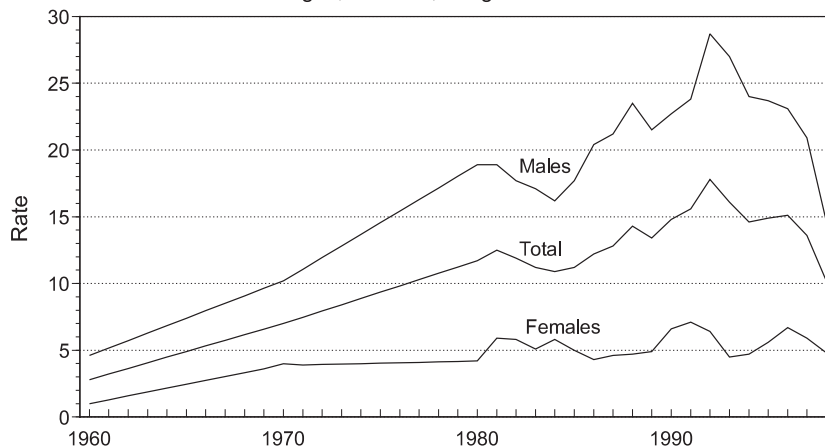
Suicide by adolescents has caused increasing concern both nationally and in Oregon. In 1987, the Oregon legislature created a law (ORS441.750) mandating that hospitals treating a child age 17 or younger for injuries resulting from a suicide attempt report the attempt to the Oregon Health Division. The law became effective in January 1988; it also requires that the patient be referred for counseling.

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

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. Nonetheless, during 1996-1998, Oregonians 15-19 years old were 3.6 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 15.6 per 100,000; among females, it increased from 1.0 to 4.5. For both sexes combined, the rate increased from 2.8 to 10.2. However, these rates are based on relatively few events and therefore subject

Figure 8-1.
Suicide Rates for 15- to 19-Year-Olds, 1959-61,
1969-71, 1979-81, and Three-Year Moving
Averages, 1981-98, 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
1998	761	190	571

Attempters of unknown sex are included in the total.

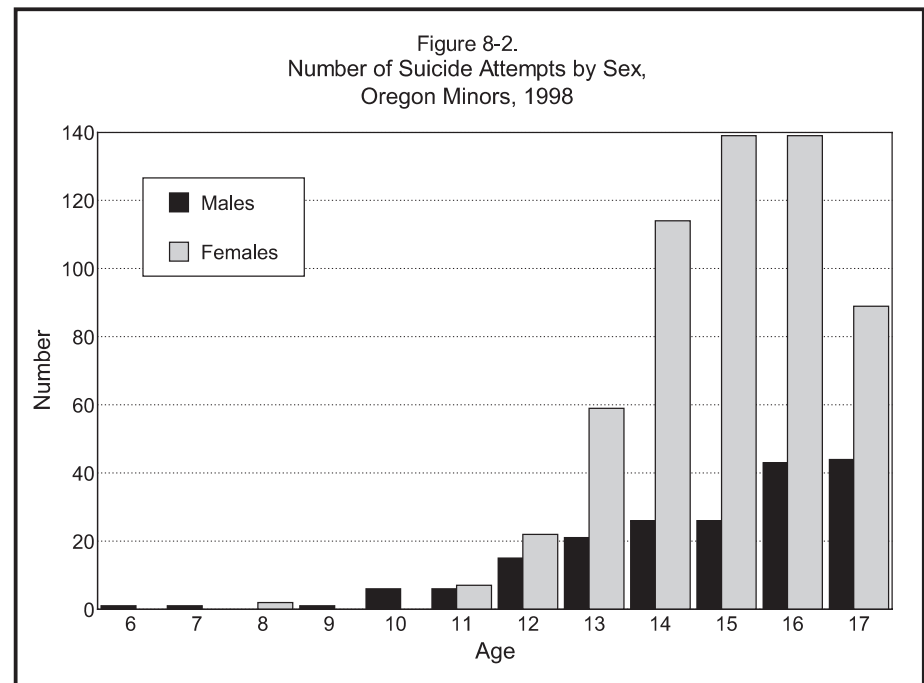
to considerable random statistical variation. This is especially true of the rates for females. Figure 8-1 illustrates the variable nature of suicide rates for 15-19 year old Oregonians during recent years.

SUICIDE ATTEMPT TRENDS

Since 1988, the number of reported suicide attempts has ranged between 526 and 778. During 1998, 761 attempts by minors were reported to the Health Division, up from 736 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.

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, this makes little difference in the calculated percentages with few exceptions (e.g., number of attempts).



AGE

The youngest child to attempt suicide was just seven years old, a boy who had been sexually abused. Sixty-one attempts by preteens were reported, 16 more than the previous year. Attempts by 13- to 17-year-olds increased by nine. As in years past, 15- to 17-year-olds accounted for about two-thirds (63%) of all attempts among Oregon minors. [Figure 8-2].

SEX

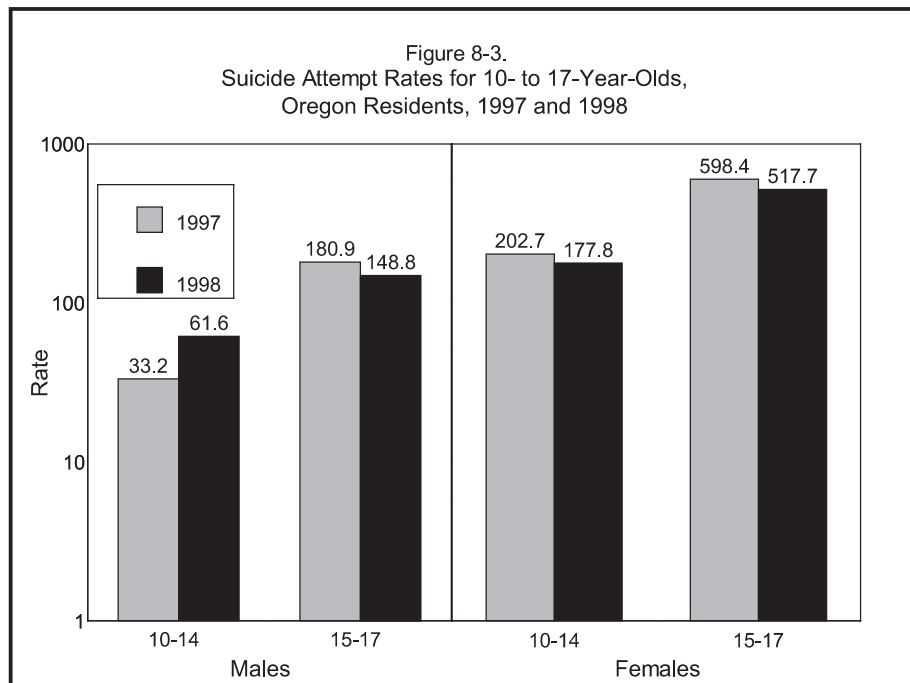
Girls were far more likely to attempt suicide than were boys; three-fourths (75%) of all attempts were by girls. [Table 8-2]. Although girls more often made attempts, attempts by males more often resulted in death, a consequence of their using more lethal methods. During 1998, the completion rate for males less than 18 years of age was 6.9 percent compared to just 0.7 percent for females in this age group. Overall, 2.3 percent of the reported attempts ended in death. Eighty-five percent of suicides by teens and preteens during 1998 were committed by males.

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 also the Center for Health Statistics report,

The youngest attempter was a seven year old boy who had been sexually abused.

Number of Attempts		
Race	1998	1997
White	683	582
African American	15	15
Indian	15	11
Chinese	0	0
Japanese	0	0
Hawaiian	0	0
Filipino	0	0
Other Asian and Pacific Islanders	14	11
Hispanic	20	28
Not Stated	14	78



Multicultural Health: Mortality Patterns by Race and Ethnicity, Oregon, 1986-1994.)

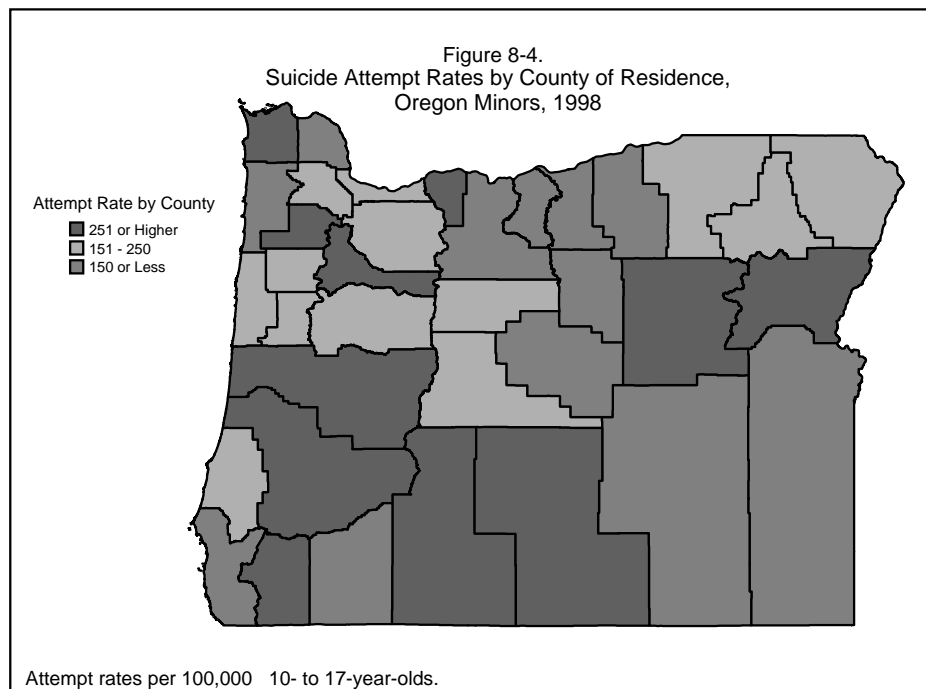
Children under government supervision were most likely to give multiple reasons for their attempts.

HOUSEHOLD SITUATION

About one-third of attempters lived with both parents (35%). Ranking second were attempters who lived with their mother only (28%) while 12 percent lived with a parent and stepparent. Just 4.9 percent lived with their father only. [Table 8-3]. Those who lived under government supervision (e.g., in an institution or foster home) more often cited three or more reasons for their attempted suicide, 37 percent did so versus 19 percent in all other living situations. The former were also most likely to have made prior attempts.

GEOGRAPHIC DISTRIBUTION

While the suicide attempt rate for the state was 200.0 per 100,000 (10- to 17-year-olds), the rates for individual counties were highly variable. [Figure 8-4.]. During 1998, among counties with ten or more attempts, the three highest rates were reported from Klamath (574.5), Douglas (294.6) and Benton (284.1) 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 *Oregon Health Trends* article “Youth Suicide: Results from the 1999 YRBS” lists suicide death rates by county.

PLACE OF ATTEMPT

Most (81%) of the attempts were made in the adolescent’s own home while 5.0 percent were made in another’s home. [Table 8-5]. Schools were the site of just 2.7 percent of the attempts.

MONTH AND DAY OF ATTEMPT

As in past years, the summer school vacation months continued to be the season of lowest risk and spring, the suicide season. Nineteen percent of the suicide attempts occurred from June through August, but half-again as many suicide attempts were reported during March through May (31%). By day of the week, suicide attempts occurred least often on Saturdays (11% of all attempts) and, departing from the usual pattern, most often on Thursdays (17%). Typically, attempts are most commonly reported on Mondays; during 1998, 16 percent of the attempts occurred 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; 46 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 majority (63%). Two-fifths (42%) of the 481 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 were with combinations of drugs or of drugs with alcohol. Cutting and piercing injuries were the second most common method of attempt, accounting for 15 percent of the cases; nearly all of these were lacerations of the wrists. The third single most common method was suffocation and hanging (5.7%). The category “other” in Table 8-7 includes mostly attempts by multiple methods; the

Both suicide attempts and completions occurred most often during the spring.

Six of every ten attempts were made with drugs.

Five of every ten suicides were committed with guns.

majority involved poisoning, usually with drugs, combined with laceration of the wrists. Uncommon methods, such as swallowing glass fragments, are also included here.

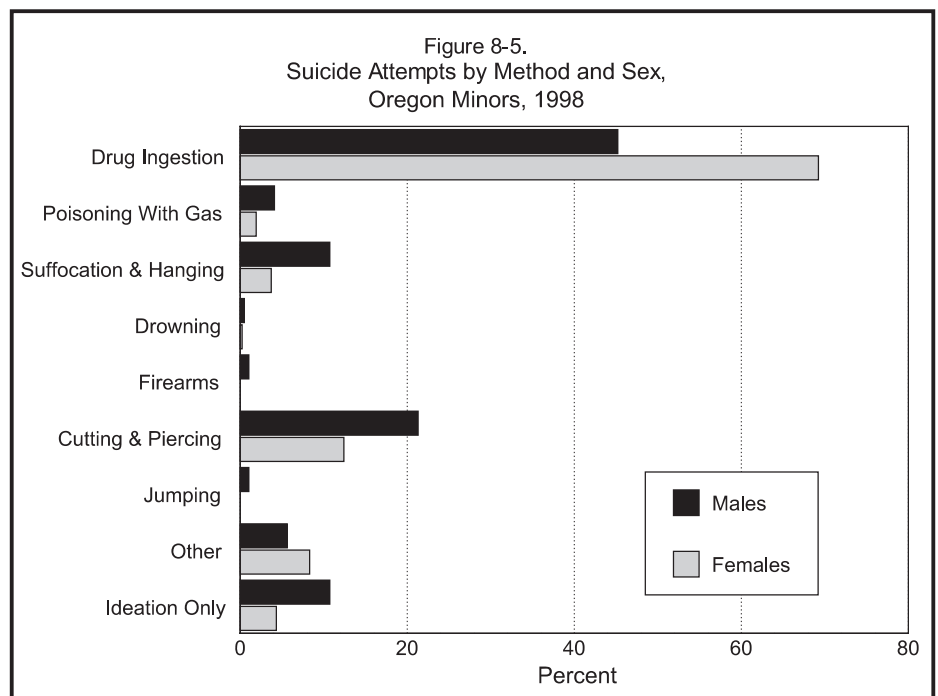
The method chosen varied with the sex of the attempter. [Table. 8-7]. More than two-thirds (69%) of the attempts by girls involved drugs compared to fewer than one-half (45%) of those by boys. [Figure 8-5]. Boys were more likely than girls to inflict cutting/piercing injuries (21% vs. 13%) and to attempt to suffocate or hang themselves (11.1% vs. 3.9%).

As with gender, the method varied with the age of the attempter. Preteens were only about half as likely as 15- to 17-year-olds to use drugs in their attempt.

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, 69 percent compared to 59 percent. [Table 8-10]. Suffocation and hanging, a more lethal method, was used more than twice as often by repeat attempters than by those making their initial attempt (8.8% vs. 3.7%).

Percentage of attempts with guns that were fatal: 82.

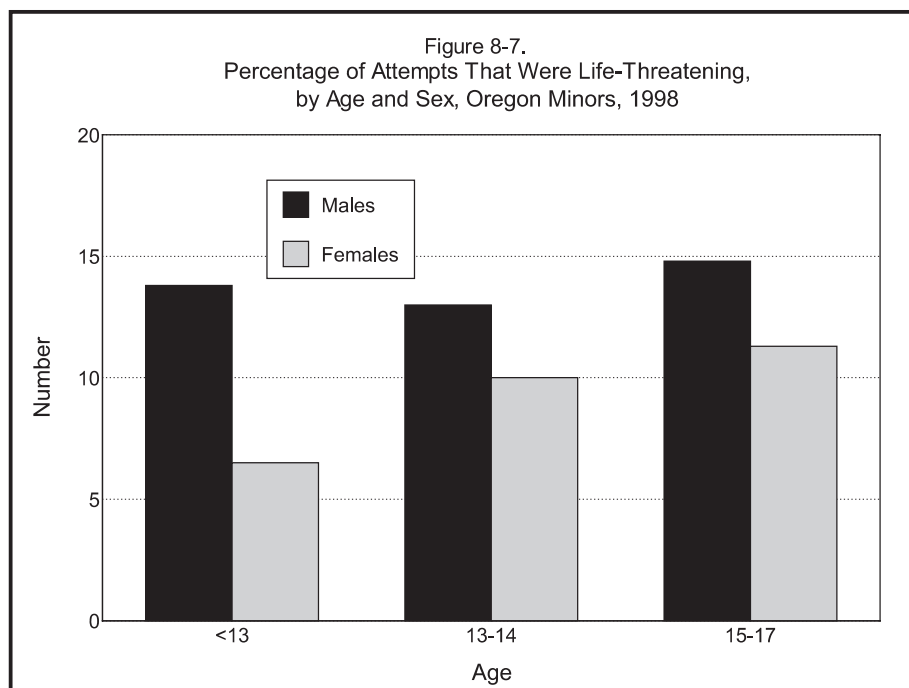
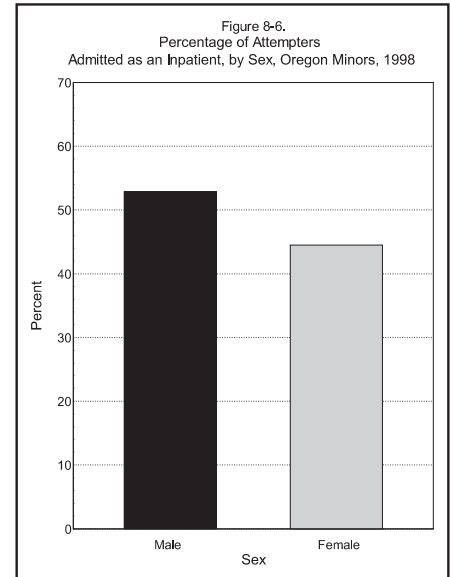


Although most attempts involved ingestion of drugs, they only infrequently resulted in death. Conversely, the highest proportion of attempts made by adolescents that resulted in death involved firearms. During 1998, half of all completed suicides (54%) by Oregonians teenaged or younger were committed 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

Nearly one-half of reported attempts (47%) 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, 53 percent compared to 45 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. Among the categories involving a single action (and with at least ten events), attempts involving hanging/suffocation or poisoning with solids or liquids other than drugs both resulted in 67 percent of the attempters requiring inpatient care. [Table 8-12]. By comparison, 41 percent of the attempts involving poisoning with drugs led to hospitalization. Attempts classified as “other” most often involved poisoning in combination with lacerations; two-thirds of these attempters were hospitalized. Also included in the “other”



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.

SEVERITY OF INJURIES

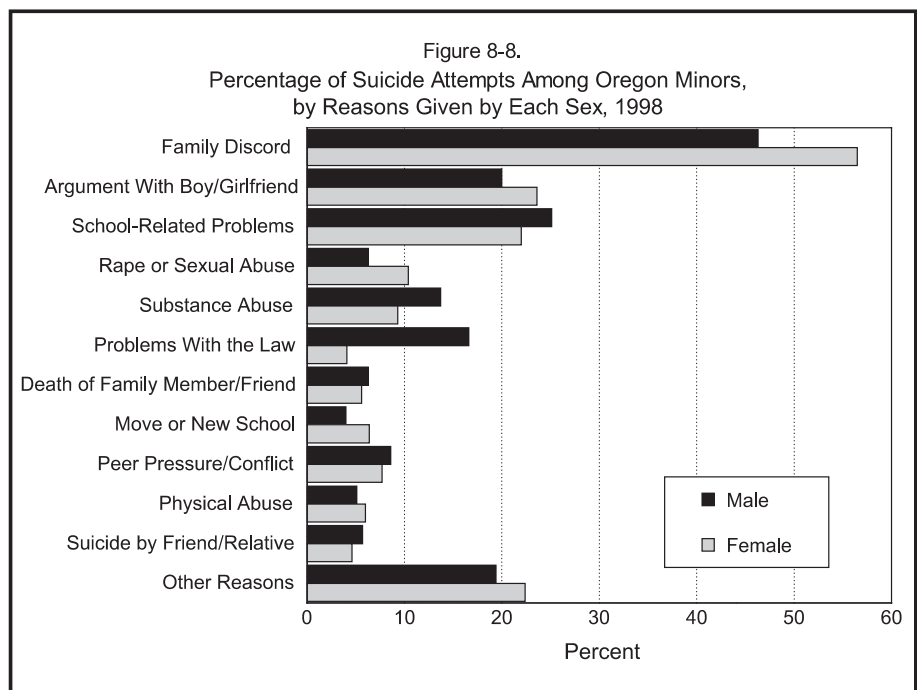
One in eight (12%) of the attempts were definitely life-threatening; another 42 percent were possibly life-threatening; attempts by boys were more often definitely life-threatening. [Table 8-13]. Some attempt methods were clearly riskier than others. Among those attempters who survived long enough to receive hospital care, suffocation/hanging and poison with solids/liquids proved especially dangerous (among the methods with at least 10 attempts). However, most fatal attempts were made with guns and death occurred before the adolescent could be transported to the hospital. Cutting and piercing injuries were least likely to be life-threatening. [Table 8-14].

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

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 16 percent and an adjusted figure of 33 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 attempters for whom the hospitals completed the attempter's intent status, 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. [Table 8-15].

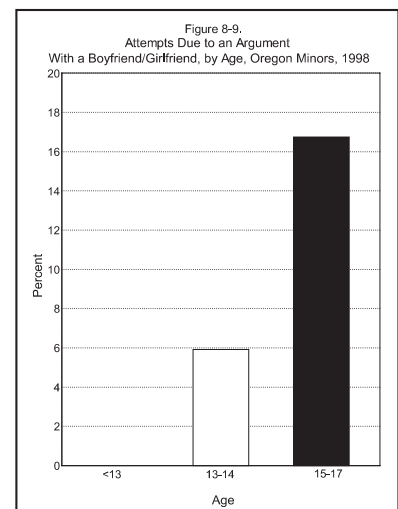
Among the methods with at least 10 attempts, attempters who used hanging/suffocation were most likely to have had death as a goal. [Table 8-16] Those attempters who use solids or liquids other than drugs to poison themselves were judged least likely to have tried to kill themselves. Some adolescents 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 one-fifth of attempters whose goal was death did not use life-threatening means.

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 13 year old boy who had been sexually and physically abused reported family discord, an argument with his girlfriend, peer pressure and conflict, and school problems; he attempted suicide by hanging. Only about 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. Just over half (54%) of Oregon minors said this prompted their attempts. [Table 8-17]. It was mentioned most often by older teens. Children attempting suicide who lived with a parent and stepparent were more likely to report family discord than those living with both natural parents, 68 percent compared to 45 percent. Family discord was mentioned by 77 percent of Asians/Pacific Islanders, and 77 percent of American Indians, the highest proportions by race; 53 percent of whites said discord was a cause. Attempters living east of the Cascade Range were nearly half again as likely to list family discord as the reason for their attempt than were those in the Tri-County area (66% vs. 48%).



School-related problems (e.g., performance, truancy) were cited by 23 percent of attempters. Boys were a little more likely to report school-related problems than were girls, 25 percent compared to 22 percent. The second most common reason for an attempt among preteens, the importance of this factor diminished with increasing age. Not surprisingly, school-related problems were least frequently reported during June through August.

An argument or break up with a boyfriend or girlfriend ranked closely behind as a reason given for suicide attempts. Girls and older attempters were more likely to give this as a reason than were boys and younger children. [Figure 8-9]. White youth were more likely to inflict self harm for this reason than were other racial/ethnic groups.

Substance abuse was linked to 10 percent of the attempts and it was listed more often by males than by females (13.8% vs. 9.3%). Sixty-nine percent of attempters mentioning substance abuse were treated as in-patients compared to 47 percent of attempters overall. Substance abuse was most common (by living situation) among homeless youth (38%); just 7.8 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, 12.4 percent versus 9.4 percent.

Sexual abuse or rape was cited by 9.3 percent of the attempters, and was reported almost twice as often by females than by males, 10.3 percent versus 6.3 percent. One-third of youth who reported sexual abuse or rape were judged to have intended to kill themselves, double the overall proportion of attempters. Sexually abused/raped attempters were among those most likely to have made repeated attempts; 49 percent had done so and 69 percent were admitted as inpatients. Most often, the rape or sexual abuse was reportedly committed by fathers, step-fathers and uncles.

Peer pressure or conflict was identified as a the cause by 7.8 percent of attempters, and was cited more often by males and preteens.

Encounters with the legal system were mentioned by 7.2 percent of the attempters. Shoplifting was most common, but also reported were assaults on parents and other relatives, prostitution, and other serious crimes. Teenagers were twice as likely to give this as a reason for their suicide attempt than were preteens while males were four times as likely to report this.

Males were four times more likely to report their criminal activity as a reason for their suicide attempt.

Substance abuse as a reason for a suicide attempt was reported less often among attempters living with two parents.

A move or attendance at a new school was cited by 5.8 percent of the attempters, with females about half again as likely to do so than males (6.4% vs. 4.0%). A new school was a greater concern among preteens than among their older counterparts. Tri-County youth were also more likely to give this as a reason, 7.1 percent versus 5.5 percent of other western Oregon youth and 4.1 percent of those residing east of the Cascades.

Physical abuse was also reported in 5.8 percent of the attempts. Preteens gave this as a reason three times more often than 15- to 17-year-olds. Physically abused children were most likely to have made attempts that were definitely or possibly life-threatening (80% vs. 52% making attempts for other reasons). They were also most likely to have made previous attempts (55%) and to be admitted as an inpatient (75%).

The death of a family member or friend prompted 5.8 percent of the attempts. Males and females were about equally likely to report this as a reason for attempting suicide. It was mentioned most often by preteens.

A suicide or attempted suicide by a family member or friend prompted 4.8 percent of the attempts. Male attempters reported this as a reason more often than females. It was more often given as a reason by teens than by preteens.

Concern about pregnancy prompted 1.7 percent of the attempts. All attempters were female and most (10 of 12) were 15 to 17 years of age.

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: parental drug abuse, abandonment, gang involvement, illness of family members or self, employment problems, 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.

Attempters reporting physical abuse were most apt to have made previous suicide attempts.

CONCLUSIONS

Although the teen suicide rate is not as high as the rates for most older Oregonians, it is still 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. Without intervention, a failed suicide attempt may be followed by an attempt that results in death. The single best predictor of death by suicide is a previous suicide attempt.

