

Adolescent Suicide Attempts

INTRODUCTION

During 1996, 38 of Oregon's youth (under age 20) committed suicide. The youngest were two ten year old boys. At the same time, no fewer than 778 non-fatal suicide attempts were made by Oregon adolescents.

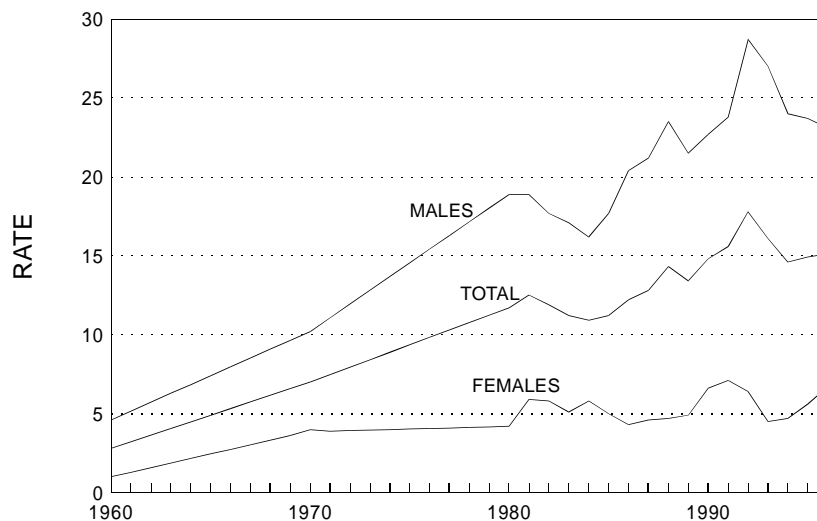
Suicide by adolescents has caused increasing concern both nationally and in Oregon. In 1987, the Oregon legislature created a law (ORS 441.750) mandating that hospitals treating a child age 17 or younger for injuries resulting from a suicide attempt report the attempt to the Oregon Health Division. The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

During 1994-1996 the suicide rate for Oregonians 15-19 years old was five times higher than during 1959-1961.

SUICIDE TRENDS

Over the past few decades, the suicide death rate among teenagers has risen dramatically, especially among males. Although the rate has declined since the early 1990s, it is unclear whether this represents a cessation of the long-term upward trend or random statistical variation. Nonetheless, during 1994-1996, Oregonians 15-19 years old were 5.4 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 23.1 per 100,000; among females, it increased from 1.0 to 6.7. For both sexes combined, the rate increased from 2.8 to 15.1. However, these

FIGURE 8-1. SUICIDE RATES FOR 15- TO 19-YEAR-OLDS, 1959-61, 1969-71, 1979-81, AND THREE-YEAR MOVING AVERAGES, 1981-96, 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

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

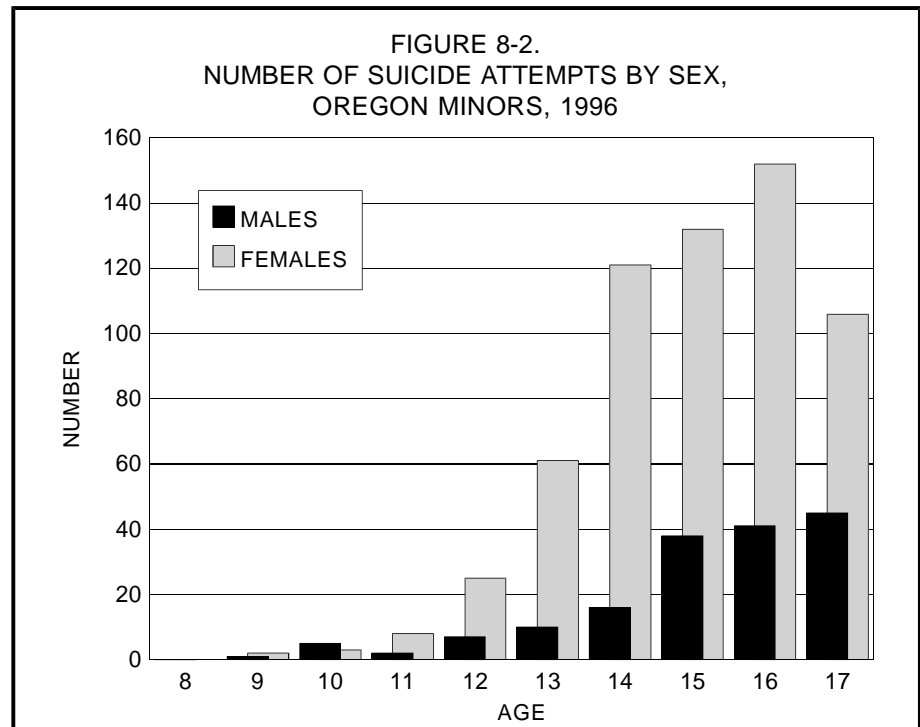
The number of suicide attempts reported to the Health Division increased to 778, up from 753 in 1995, but just marginally higher than the previous record high of 773 recorded in 1994.

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.

AGE

The youngest children to attempt suicide were just nine years old, a boy and two girls. One girl was motivated by problems at school, family discord and rape/sexual abuse; the other by an argument or breakup with a boyfriend. The treating hospital for the boy failed to record his reasons. Fifty-two attempts by preteens

NUMBER OF ATTEMPTS BY AGE AND SEX			
AGE	TOTAL	MALE	FEMALE
9	3	1	2
10	7	4	3
11	10	2	8
12	32	7	25
13	72	10	62
14	137	15	122
15	171	38	133
16	192	40	152
17	154	46	108



were reported (see sidebar on p. 8-2), five more than the previous year. Attempts by teens increased 2.8 percent. As in years past, 15- to 17-year-olds accounted for two-thirds (66%) of all attempts among Oregon minors. [Figure 8-2].

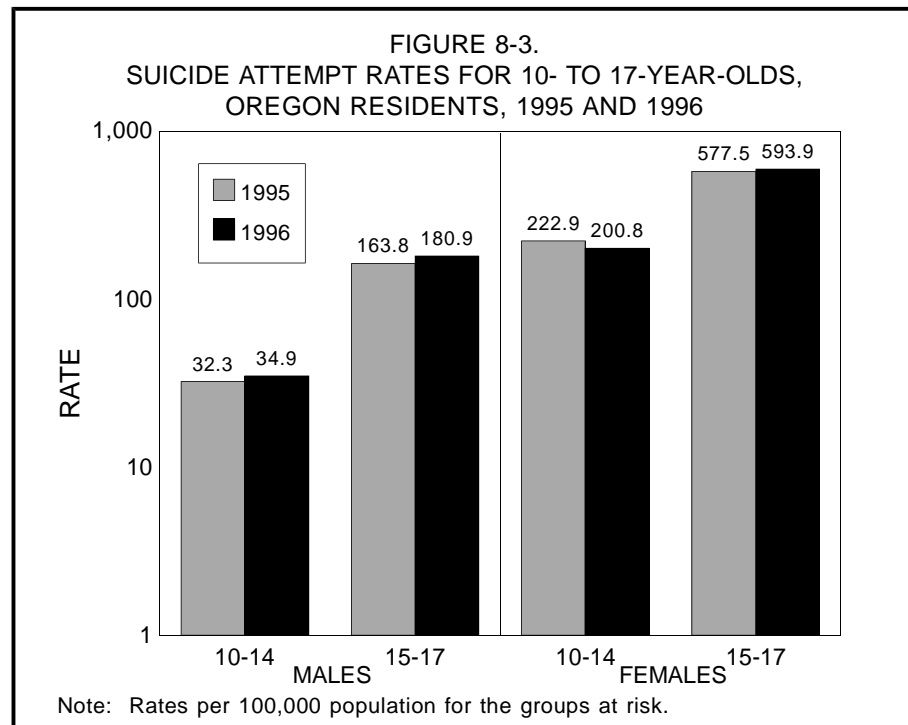
SEX

Girls were far more likely to attempt suicide than were boys; four-fifths (79%) of all attempts were by girls, but the largest increase in the attempt rate between 1995 and 1996 was among boys 15-17 years old. [Table 8-2]. Although girls made attempts more often, attempts by males more often resulted in death. During 1996, the completion rate for males less than 18 years of age was 10.0 percent compared to just 0.8 percent for females in this age group. Overall, 3.0 percent of the reported attempts ended in death. Four-fifths (79%) of suicides by teens and preteens during 1996 were committed by males.

RACE

Almost a threefold difference existed in the reported suicide attempt rates during 1992-96 by racial/ethnic group. At 279.2 per 100,000 population (10- to 17-year-olds), African American adolescents were 35 percent more likely than whites (207.2) to make an attempt. American Indian youth were less likely than either of these groups to make an attempt (157.0), but Hispanics (122.3) and Asians/Pacific Islanders (106.3) had the lowest recorded rates. The attempt rates for all of the minority groups, were statistically significantly different compared to the attempt rate for

NUMBER OF ATTEMPTS		
RACE	1995	1996
WHITE	645	659
AFRICAN AMERICAN	20	20
INDIAN	8	9
CHINESE	0	0
JAPANESE	0	0
HAWAIIAN	0	0
FILIPINO	1	0
OTHER ASIAN AND PACIFIC ISLANDERS	12	13
HISPANIC	33	29
NOT STATED	34	48



SUICIDES BY OREGONIANS UNDER AGE 20, BY YEAR AND COUNTY OF RESIDENCE			
COUNTY	1994	1995	1996
TOTAL	37	43	38
BAKER	1	-	1
BENTON	1	1	-
CLACKAMAS	5	4	4
CLATSOP	-	3	-
COLUMBIA	1	-	-
COOS	-	-	-
CROOK	-	2	-
CURRY	-	1	-
DESCHUTES	1	-	2
DOUGLAS	2	1	1
GILLIAM	-	-	-
GRANT	-	-	-
HARNEY	-	-	-
HOOD RIVER	1	-	-
JACKSON	-	1	-
JEFFERSON	-	1	1
JOSEPHINE	-	1	-
KLAMATH	1	1	1
LAKE	1	-	-
LANE	2	5	4
LINCOLN	1	-	1
LINN	2	2	1
MALHEUR	-	-	-
MARION	6	5	3
MORROW	-	-	-
MULTNOMAH	7	10	12
POLK	1	-	1
SHERMAN	1	-	-
TILLAMOOK	-	-	-
UMATILLA	2	1	2
UNION	-	-	-
WALLOWA	-	-	-
WASCO	1	-	-
WASHINGTON	-	3	3
WHEELER	-	-	-
YAMHILL	-	1	1

- QUANTITY IS ZERO.

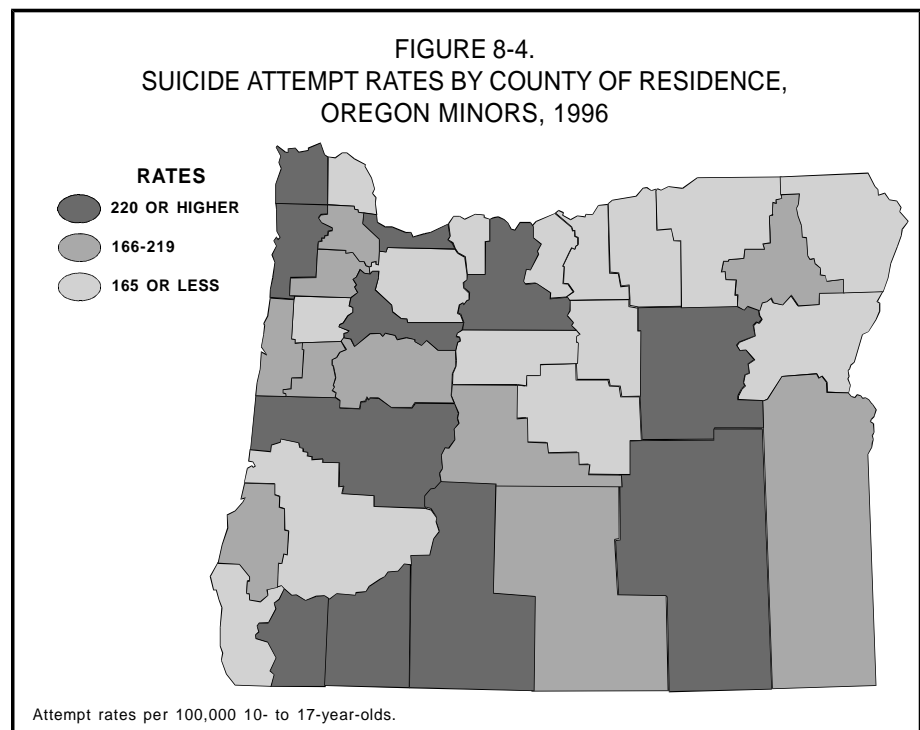
whites. See the report, *Multicultural Health: Mortality Patterns by Race and Ethnicity, Oregon, 1986-1994*, for analysis of suicide deaths of all ages by race/ethnicity.

HOUSEHOLD SITUATION

Attempters were more likely to live with their mother only (35%) as they were to live with both natural parents (27%). Ranking third were adolescents living with a parent and stepparent (12%). The proportion of attempters living with their mother only decreased with the age of the attempter while the proportion living with their father only increased with age. [Table 8-3]. Adolescents living under government supervision were most likely to have made prior attempts; 42 percent had done so. The family situation was unknown in 11 percent of the cases.

GEOGRAPHIC DISTRIBUTION

While the suicide attempt rate for the state was 217.7 per 100,000 (10- to 17-year-olds), the rates for individual counties were highly variable. [Figure 8-4.]. During 1996, among counties with ten or more attempts, the highest rates were reported from two western Oregon counties, Clatsop and Marion. In four 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 (73%) of the attempts were made in the adolescent's own home while 4.5 percent were made in another's home. Girls were more likely than boys to make the attempt at home, 75 percent compared to 68 percent. [Table 8-5]. Schools were the site of just 2.7 percent of the attempts. Because the place was not reported in 10.3 percent of the attempts, the above percentages are somewhat lower than the "true" proportions.

MONTH AND DAY OF ATTEMPT

As in past years, the summer school vacation months continued to be the season of lowest risk. Twenty-one percent of the suicide attempts occurred from June through August. Attempts occurred most often during the spring months (30%). By day of the week, suicide attempts occurred least often on Saturdays (13% of all attempts) and most often on Mondays (16%).

REPEAT ATTEMPTS

About three of every ten (29%) attempts were by adolescents who were reported to have made prior attempts during the previous five years. This is a minimum figure since the prior attempt status was unknown in 25 percent of the cases. Girls were more likely to have made prior attempts; 30 percent had done so compared to 24 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 (78%). Two-fifths (40%) of the 604 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 7.6 percent of the cases; nearly all of these were lacerations of the wrists. The third single most common method was suffocation and hanging (5.0%). The category "other" in Table 8-7 includes mostly attempts by multiple methods; the majority involved

Suicide attempts were made most often on Mondays.

Eight of every ten attempts were made with drugs.

Six of every ten suicides were committed with guns.

poisoning, usually with drugs, combined with laceration of the wrists. Uncommon methods, such as attempted electrocution with a hair dryer in a bathtub, are also included here.

The method chosen varied with the sex of the attempter. [Table. 8-7]. Eight in ten (83%) of the attempts by girls involved drugs compared to six in ten (57%) of those by boys. [Figure 8-5]. Boys were more likely than girls to choose suffocation and hanging, 12.3 percent compared to 3.1 percent. Boys were also more likely than girls to inflict cutting/piercing injuries, 10.4 percent versus 6.8 percent.

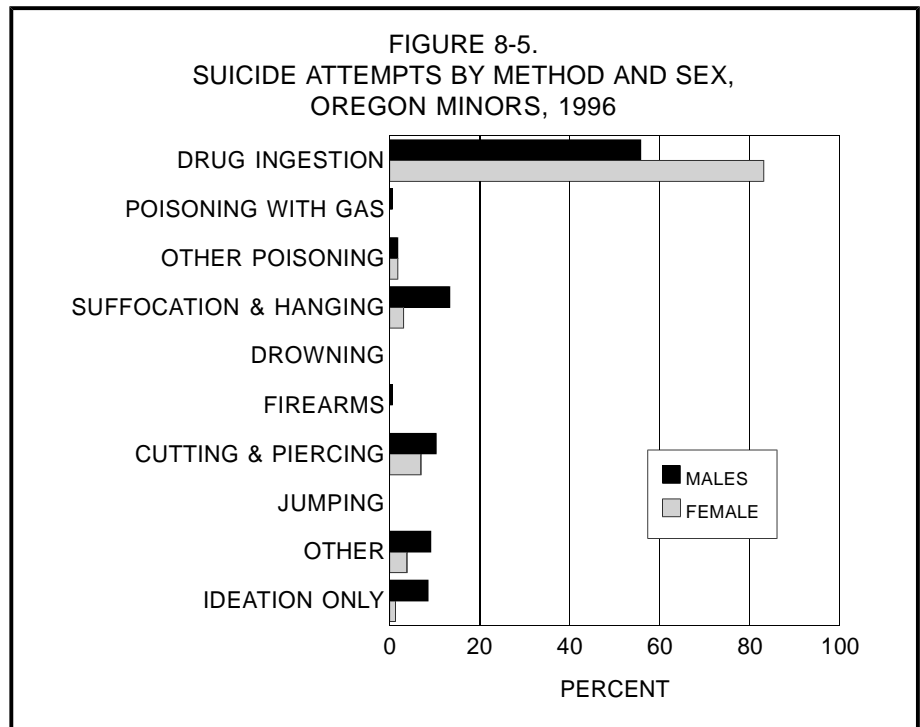
As with gender, the method varied with the age of the attempter. Preteens were more likely to attempt to suffocate/hang themselves and to poison themselves with solids and liquids other than drugs. [Table 8-8]. The incidence of cutting and piercing injuries, as well as "other" methods increased with age.

Regionally, adolescents living east of the Cascade Range were most apt to use poisons in their attempts and least apt to cut themselves. [Table 8-9].

Adolescents making their first attempt were more likely to ingest drugs compared to those making a repeat attempt, 83 percent compared to 72 percent. [Table 8-10]. Suffocation and hanging, a more lethal method, was used three times as often by repeat attempters than by those making their initial attempt (10.3% vs. 3.1%).

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

Percentage of attempts with guns that were fatal: 96

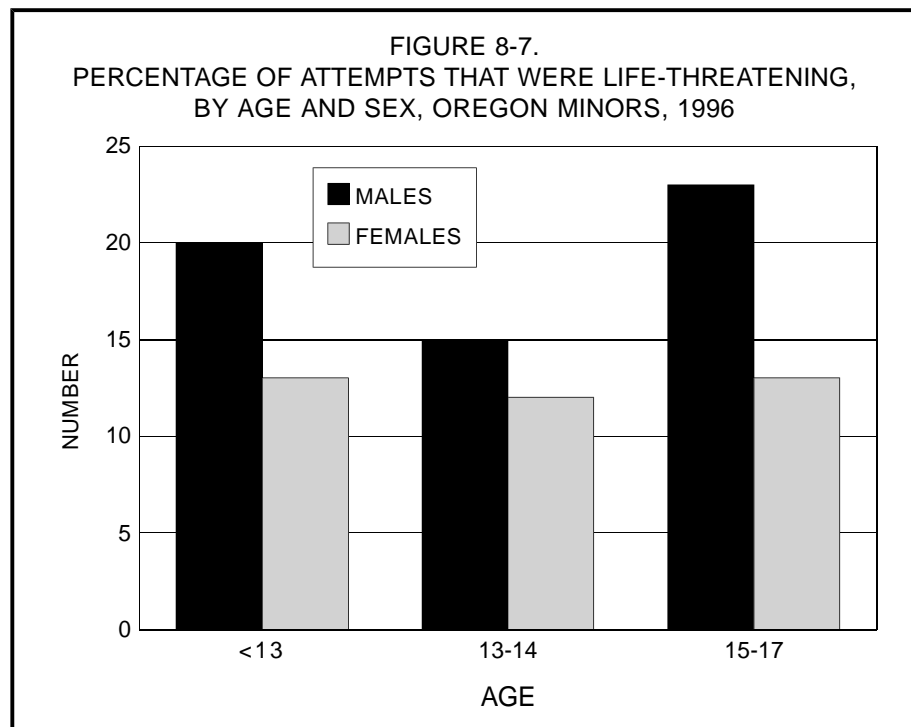
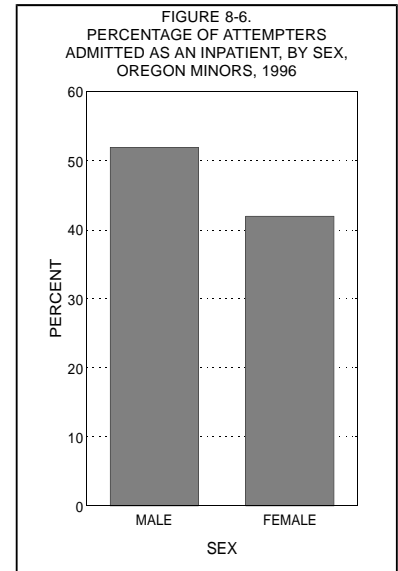


firearms. During 1996, 63 percent of all suicides by Oregonians teenaged or younger were committed with guns (most were handguns). Only one attempt with a firearm did not result in death. For a discussion of the lethality of attempt methods, see *Suicidal Behavior: A Survey of Oregon High School Students, 1997*.

PATIENT STATUS

Nine in 20 reported attempts (44%) 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 inpatients, 52 percent compared to 42 percent of females. Youngsters making their first attempt were least likely to be hospitalized; just 43 percent were compared to 63 percent of those who had made three or more prior attempts.

Certain methods were more likely than others to result in hospitalization. Of the categories with at least ten events, attempts involving hanging or suffocation most often resulted in hospitalization; 69 percent of attempters using these methods were hospitalized. [Table 8-12]. By comparison 32 percent of the attempts involving cutting led to hospitalization. About six in ten (61%) 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.



SEVERITY OF INJURIES

One in seven (14%) of the attempts were definitely life-threatening; another 37 percent were possibly life-threatening. Attempts by boys, especially those aged 15-17, 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 and hanging attempts proved most 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].

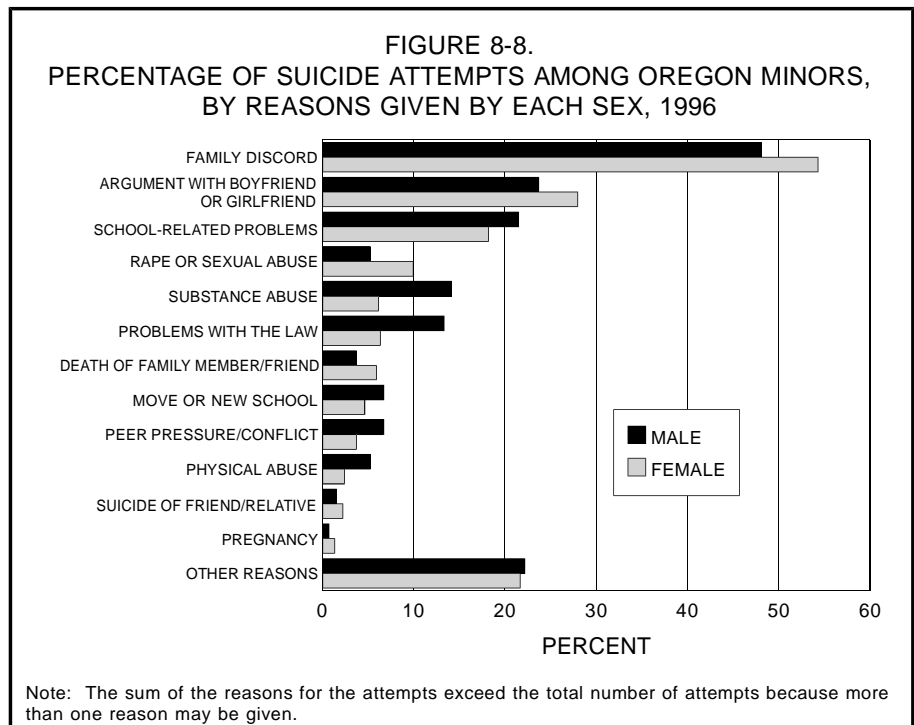
Attempts by suffocation and hanging were eight times more likely to be definitely life-threatening than were cutting and piercing injuries.

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.

The intent of the attempters was unknown in half (49%) of the cases but at least one in six (16%) of the attempters were believed to have tried to kill themselves. Males age 15-17 were twice as likely as preteen females to have truly tried to end their lives, 21 percent versus 11 percent. [Table 8-15].

Among the methods with at least 10 attempts, attempters who tried to hang or suffocate themselves were most likely to



have had death as a goal. [Table 8-16]. Most of the attempts in this category involved hanging. 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; over one-third (36%) of those who did not attempt to kill themselves made attempts that possibly or certainly put their lives at risk while 4.2 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 13 percent of those who had not made a prior attempt sought death, 22 percent of those who had made at least three prior attempts did so.

Attempters who were definitely trying to kill themselves were most likely to be admitted as inpatients: 70 percent compared to 43 percent of suicide ideators and 27 percent of those who did not attempt to kill themselves. (Suicide ideation is the expression of suicidal thought; no actual attempt is made.)

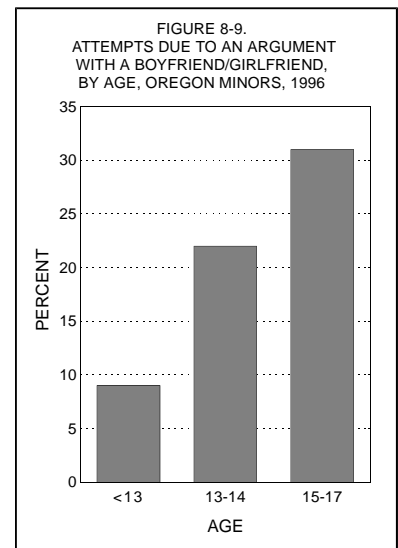
RECENT PERSONAL EVENTS

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 teenage boy, for example, was suicidal as a consequence of family discord, breakup with his girlfriend, eviction by his parents, and substance abuse. Only about one-fourth 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. A little over half (53%) of Oregon minors said this prompted their attempts. [Table 8-17].¹ It was mentioned most often by preteens. Children attempting suicide who lived with a parent and step-parent were more likely to report family discord than those living with both natural parents, 63 percent compared to 58 percent. Family discord was mentioned by 73 percent of Asian and Pacific Islanders, and 78 percent of American Indians, the highest proportions by race; 53 percent of whites said discord was a cause. Attempters living in the tri-county area (Clackamas, Multnomah, and Washington) were more likely (60%) to report discord than others (49%).

An argument or breakup with a boyfriend or girlfriend was the second leading cause (27%). 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].



Three of every five suicide attempters who had been raped or sexually abused made multiple suicide attempts.

School-related problems (e.g., performance, truancy) were cited by one in five (19%) attempters. Boys were marginally more likely to report school-related problems than were girls, 22 percent compared to 18 percent. Preteens were half again as likely to report this reason than were attempters 15 or older. Tri-county youth mentioned this almost twice as often as others (27% vs. 14%). Not surprisingly, school-related problems were least frequently reported during June through August.

Sexual abuse or rape was cited by 9.0 percent of the attempters, and was reported twice as often by females than males, 9.9 percent versus 5.3 percent. Thirty-six percent of attempters reporting sexual abuse or rape had made previous attempts (compared to 28 percent of those who did not report it). Most often, the rape or sexual abuse was reportedly committed by fathers and uncles.

Substance abuse was linked to 7.6 percent of the attempts. It was listed over twice as often by males as by females (14.3% vs. 6.0%). 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 also mentioned by 7.6 percent of the attempters. Shoplifting was most common but also reported were arson and other felonies. Males were twice as likely to attempt suicide for this reason, as were youth living east of the Cascades (compared to tri-county youth).

The death of a family member or friend prompted 5.4 percent of the attempts. Females were a little more likely to state that this was a reason for their attempt, as were preteens. Nineteen percent of youth who cited death of a family member or friend had made a previous attempt, the lowest proportion, by reason.

A move or attendance at a new school was cited by 5.0 percent of the attempters, with males more likely to do so than females, 6.8 percent versus 4.6 percent. By age, preteens were most likely to report this as the cause of their attempt.

Peer pressure or conflict was identified as a cause by 4.3 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%).

Physical abuse was reported in 2.9 percent of the attempts. Preteens gave this as a reason far more often than older attempters and males reported this twice as often as did females. Physically abused children were most likely to have made repeated attempts (45% vs. 29% making attempts for other reasons), and also most 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 2.1 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 1.2 percent of the attempts. With the exception of one male, all of the attempters were female and all but one were 15 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, until the past several years it has trended upward, and is higher than it was just a generation ago.

Health care professionals, parents, law enforcement officials and others need to be aware that the changing social milieu is prompting more adolescents to consider suicide as an option. Without intervention, a failed suicide attempt may be followed by an attempt that results in death.

1. The reasons for suicide attempts were reported for 88 percent of the attempts. The percentages here include only attempts for which the reasons were known.

Physically abused children were most likely to have repeatedly tried to kill themselves; nearly half made multiple attempts.
