

Youth Suicide Attempts

Youth suicide has been a persistent problem among the state's youth. During 2000, 802 suicide attempts by Oregon youth ages 17 or younger were reported by Oregon hospitals, or about two per day.

The Oregon 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.

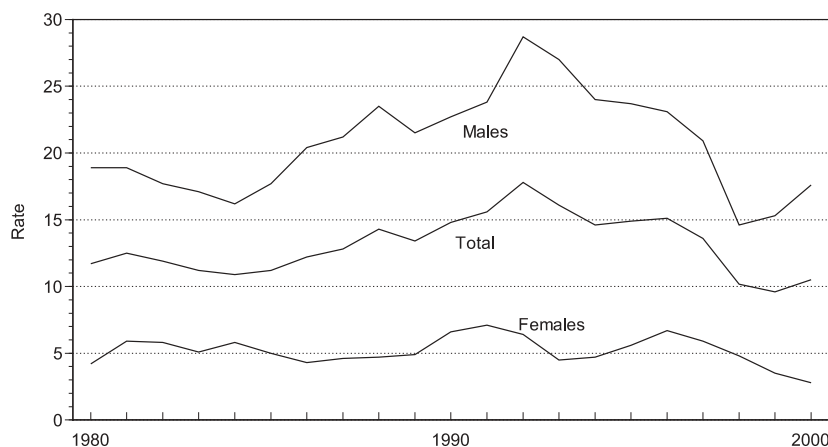
The proportion of youth described with a specific characteristic is based on only those cases with known values; that is, attempts in the "not stated" categories are excluded before the percentages are calculated. In most cases this makes relatively little difference in the calculated percentages.

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

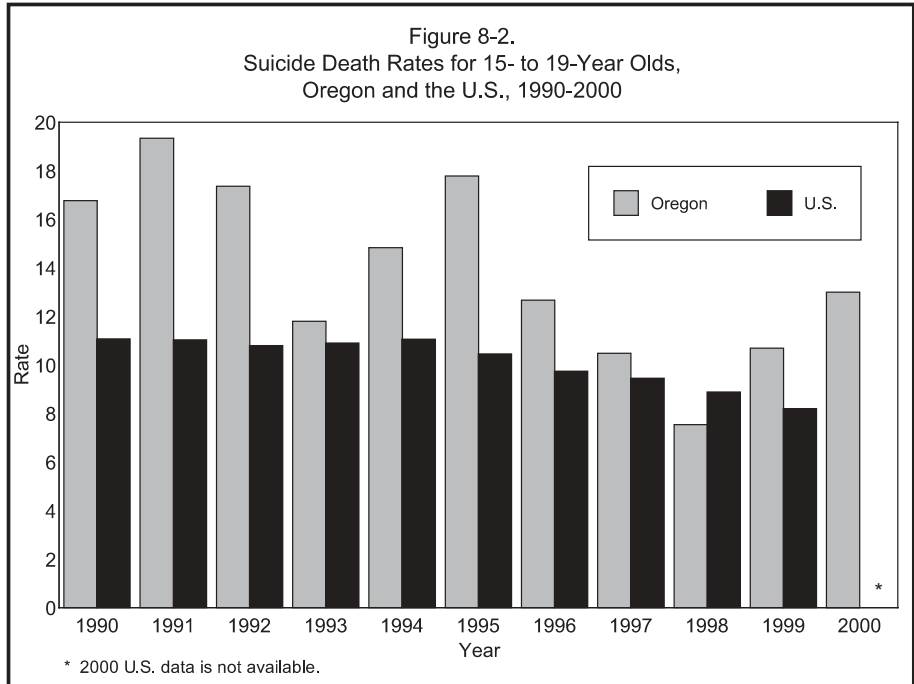
During 2000, 37 Oregon teens and preteens died by suicide compared to 29 during the previous year. Because the number of events are small and subject to considerable random statistical variation from year-to-year, a better measure of the risk of suicide among teens are three-year moving rates¹, commonly expressed as the number of events among 15 to 19-year-olds per 100,000 population.

Figure 8-1.
Suicide Rates for 15- to 19-Year-Olds, Three-Year Moving
Averages, 1981-2000, 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.

**Eight in 10
attempts with guns
ended in death.**



Although teen suicide death rates increased dramatically during the past generation, they have declined equally dramatically since the early 1990s. [Figure 8-1]. During 1998-2000, Oregonians 15-19 years old were 13.2 percent less likely to commit suicide than were their counterparts during 1979-1981 (10.5 versus 12.1 per 100,000 population). More strikingly, the current suicide rate is 41.0 percent lower than the peak rate of 17.8 during 1990-1992.

Males have long been at greater risk of suicide than females; during 1998-2000, their rate was six times higher (17.6 versus 2.8). By comparison, during 1979-1981, the rates were 19.8 and 4.2, respectively. At the peak during 1990-1992, rates of 28.7 and 6.4 were recorded.

While most suicide deaths occur at home, some youth who are transported to Emergency Departments die in the hospital. The risk of death is increased by the lethality of the method, the degree of injury that is self-inflicted, 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 1997-1999 (the most recent available data), the national suicide death rate for 15- to 19-year-olds was 8.8 per 100,000 population. By comparison Oregon's rate was 9.6 per 100,000 population, or 9.1 percent higher.

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
1999*	738	180	558
2000*	802	178	624

Attempters of unknown sex are included in the total.
* Excludes suicide ideators.

SUICIDE ATTEMPTS

Data Caveats

The Oregon suicide attempt reporting system identifies only those 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 attempt rates over time, particularly by county. See the Technical Notes section in Appendix B for additional information on methodology.

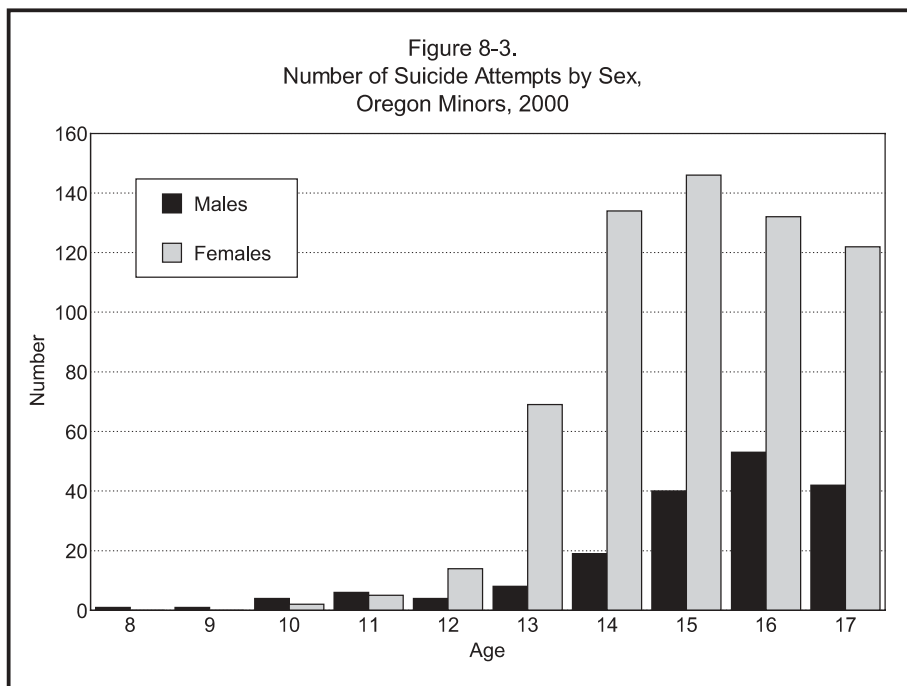
The youngest youth for whom a suicide attempt was reported was an eight-year-old boy who experienced family discord.

Gender

Girls were far more likely to attempt suicide than were boys; three-fourths (77.8%) of all attempts were by young females. [Table 8-2].

Age

The youngest child reported to have made a suicide attempt was an eight-year-old boy who poisoned himself after experiencing family discord. Thirty-seven attempts by pre-teens were reported. [Table 8-2]. Attempts by 13- to 14-year-olds numbered 230 and those by 15- to 17-year-olds totaled 535. As in years past, 15- to 17-year-olds accounted for two-thirds (66.7%) of the reported suicide attempts. [Figure 8-3].



Number of Attempts		
Race	2000	1999
White	693	622
African American	20	21
Indian	17	7
Chinese	0	0
Japanese	1	0
Hawaiian	1	0
Filipino	1	1
Other Asian and Pacific Islanders	8	11
Hispanic	55	38
Not Stated	6	38

Race

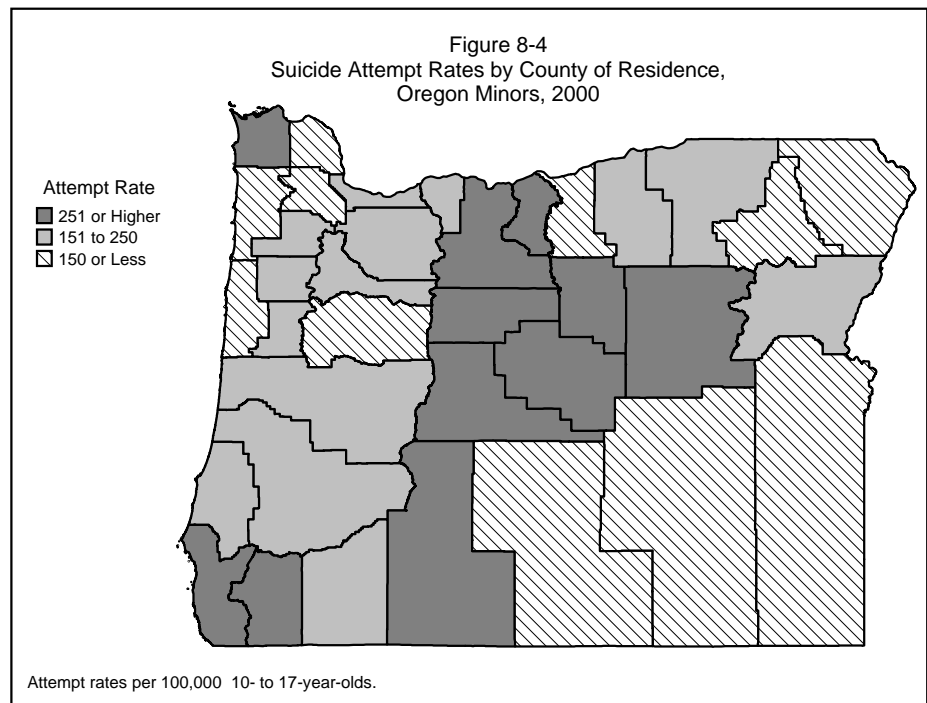
The number of suicide attempts by race/ethnicity are shown in the sidebar to the left. Reflecting the racial/ethnic composition of the state, most attempts were made by white youth.

Household Situation

Among youth who were reported to have attempted suicide, the largest group (33.0%) lived with both parents. Ranking second were youth living with their mother only (26.7%) while 12.6 percent lived with a parent and stepparent. [Table 8-3]. Attempts involving youth living under government supervision (e.g., in an institution or foster home) accounted for 8.5 percent of all attempts. These youth more often cited three or more reasons for their attempt, 33.3 percent did so vs. 22.2 percent of attempters overall. They, and youth living with relatives, were most likely to have made prior attempts; 50.8 percent of each group had done so.

Geographic Distribution

While the suicide attempt rate for the state was 205.4 per 100,000 (10- to 17-year-olds), the rates for individual counties varied widely. [Figure 8-4]. During 2000, among counties with 10 or more attempts, the three highest rates were reported from Crook (724.6), Jefferson (394.0), and Josephine (355.7). No attempts were reported for adolescents in two counties, Gilliam and Wallowa. Table 8-15 lists the number of reports by hospital for the past 11 years. The *Oregon Health Trends* (No.



57) article “Youth Suicide: Results from the 1999 YRBS” lists multi-year suicide death rates by county. It is available on the web at: <http://ohd.hr.state.or.us/chs/oht.htm>.

Place of Attempt

Most (79.6%) of the attempts were made in the adolescents own home while an additional 4.2 percent were made in another’s home. [Table 8-5]. About one in 20 attempts occurred on school grounds.

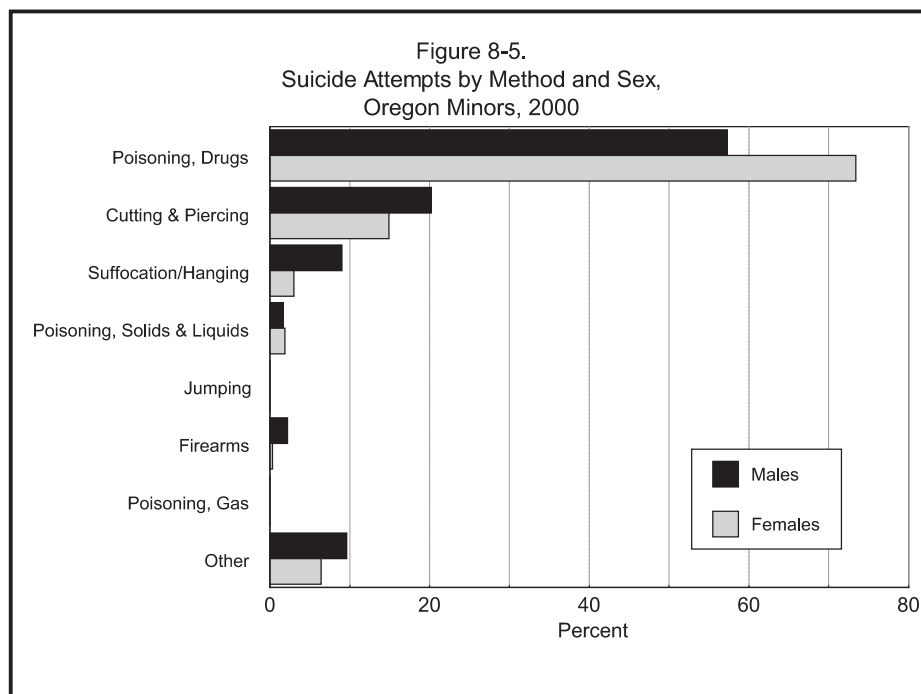
More attempts were made on Monday than on any other day.

Month and Date of Attempt

As in past years, the summer school vacation months continued to be the season of lowest risk and spring the season of greatest risk; 17.7 percent of the suicide attempts occurred from June through August, but half-again as many suicide attempts were reported during March through May (30.7%). About one-quarter (25.8%) of the attempts occurred during each of the two remaining quarters. By weekday, Mondays as usual, posed to greatest risk (18.2% of all attempts) and Saturdays the least (9.7%). For further information on temporal trends, see *Suicide and Suicidal Thoughts*, also published by this office, and available on the web at <http://www.ohd.hr.state.or.us/chs/suicide/suicide.pdf>.

Past Attempts

Nearly as many suicide attempts were by youths who had reported past attempts as were by those who had not (46.5%



Six of every ten attempts were made with drugs.

vs. 53.5%). Females were marginally more likely to have made prior attempts. [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 attempts with a given characteristic may be influenced by repeated attempts of a single individual.

Method

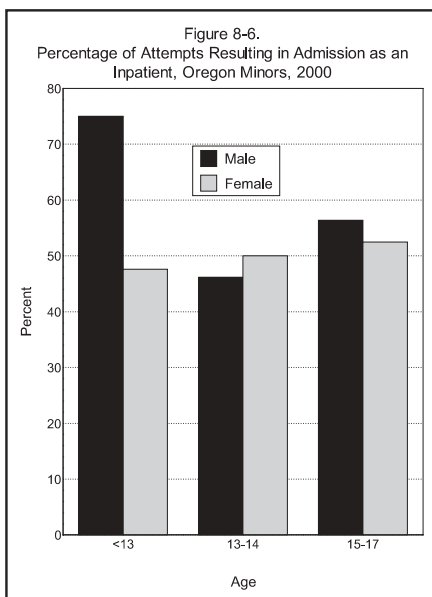
Adolescents used many methods in their attempts, but ingestion of drugs accounted for the majority (69.8%). Girls were especially likely to use this method; 73.4 percent did so compared to 57.3 percent of boys. [Figure 8-5]. Two-fifths (37.9%) of the 560 drug-related cases involved analgesics; aspirin 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 ranked second, accounting for 16.1 percent of the cases; nearly all of these were lacerations of the wrists. Reflecting their predilection to use more violent and/or lethal methods, boys more often cut and lacerated themselves than did girls, 20.2 percent versus 14.9 percent.

The third single most common method was hanging/suffocation (4.4%). Attempts using hanging/suffocation are second only to gunshots in the risk of death. Boys more often used this method (9.0% vs. 3.0% of girls).

The category “other” in Table 8-7 includes mostly attempts by multiple methods; the majority involved poisoning, usually with drugs, combined with lacerations of the wrists. Uncommon methods such as jumping in front of, or crashing, a motor vehicle, are also included here.

Table 8-8 shows that youth making repeated attempts were more likely to use more violent methods (although not necessarily more lethal methods). While the percentage of attempts resulting from medication overdoses declined from 76.0 percent for those with no previous attempts to 62.8 percent of those with a prior attempt, attempts by suffocation and hanging increased from 3.2 percent to 6.4 percent and attempts by cutting and piercing increased from 12.6 percent to 19.3 percent.



Admission Status

More than one-half (52.6%) of youth treated in a hospital for an attempt were admitted as inpatients. [Table 8-9]. Males were a little more likely to be admitted as inpatients, 56.6

percent versus 51.5 percent of females. [Figure 8-6]. And, contrary to commonly held belief, preteens were more likely to inflict injuries that required hospitalization than were their older counterparts, although in some cases it may be the circumstances leading to the attempt rather than the nature of the injuries themselves that led to inpatient admission. Certain methods were more likely than others to result in hospitalization. Among the categories involving a single action (and with at least 10 events), attempts by suffocation and hanging were more than twice as likely to lead to hospital admission as an inpatient than to treatment on an outpatient basis. [Table 8-10].

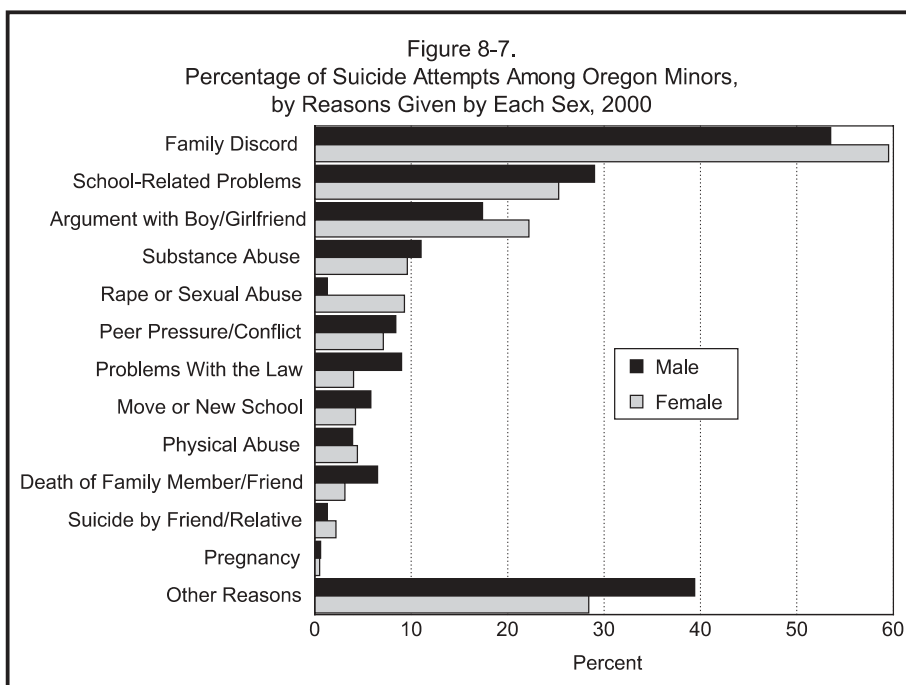
Recent Personal Events

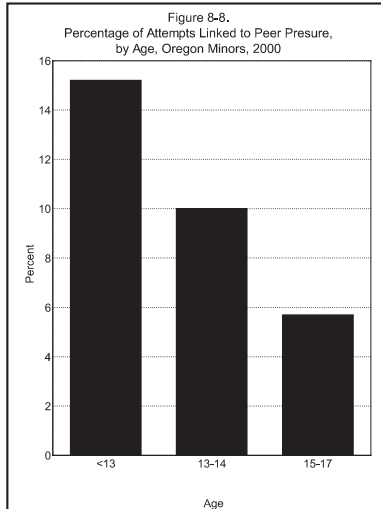
A suicide attempt may be triggered by a variety of personal crises. [Figure 8-7]. The report form allows one or more events leading to the attempt to be recorded. For example, a 15-year-old girl reported family discord and witnessing family violence, an argument with her girlfriend or boyfriend, gender issues, the suicide of a friend, physical abuse, and a father who was in prison for murder.

Lack of social support is a common thread among adolescents who attempt suicide, especially among those who cite multiple reasons. Only about one-third of youths who attempted suicide lived with both natural parents. The most commonly reported reasons follow in order by frequency:

Family discord was the most common factor associated with a suicide attempt. Nearly six in ten (58.2%) Oregon minors reported discord as a precipitating event, with females

Family discord was the most common precipitating factor.





somewhat more likely to do so (59.5% compared to 53.5% of males). [Table 8-11]. Preteens were most likely to report family discord (75.8% vs. 55.8% of 15- to 17-year-olds). Among the precipitating factors for suicide attempts, family discord was least likely to result in inpatient hospitalization. [Table 8-13].

School-related problems (e.g., performance, truancy) were cited by one in four youth (26.1%) treated for a suicide attempt. Males more often reported school-related problems than did females (29.0% vs. 25.3%). All age groups were about equally likely to report this factor.

An argument with a boy/girlfriend was reported by one in five youth (21.1%) and was the third most common reason given for a suicide attempt. As in the past, this prompted more attempts by girls than by boys (22.2% vs. 17.4%). While only infrequently cited by preteens (1 in 16 attempts), it was far more common among 15 to 17-year-olds (1 in 4 attempts).

Substance abuse, ranking fourth, was cited by 9.9 percent of youth who attempted suicide. Although males were more likely to report substance abuse, the difference between the sexes was small, 11.0 percent of males compared to 9.6 percent of females. Not surprisingly, substance abuse was reported least often by preteens (3.0%) and most often by 15- to 17-year-olds (11.7%). Among the precipitating events cited by at least 10 youth, substance abuse ranked among the top tier of factors leading to hospital admission as an inpatient. [Table 8-13].

Rape or sexual abuse was reported by 7.5 percent of youth attempting suicide, making it the fifth most commonly mentioned precipitating event. Almost one in ten girls said they were prompted to attempt suicide because they had been raped or sexually abused; by comparison 1 in 77 boys mentioned rape/sexual abuse. It was reported most often by 13- to 14-year-olds. Youth reporting rape/sexual abuse were second only to those reporting physical abuse in having made prior attempts. [Table 8-12].

Peer pressure/conflict was the sixth most commonly cited reason and was listed on 7.4 percent of the attempt reports. In the past, females were more likely than males to report this as a precipitating event, but in 2000 males more often did so (8.4% vs. 7.1%). The role of peer pressure as a precipitating event declines as youth age; 15- to 17-year-olds were only about a third as likely to mention this as were preteens (5.7% vs. 15.2%).

Problems with the law were reported by 5.1 percent of attempters, making it the seventh most commonly cited variable. Males were twice as likely as females to cite this (9.0% vs. 4.0%). Youth 14 or younger reported legal problems more often than their older counterparts.

A move or attendance at a new school was a factor in 4.5 percent of the suicide attempts. Males were somewhat more likely than females to report this (5.8% vs. 4.2%). By age, it was most common among older youth.

Physical abuse, although not often cited, was most likely to cause youth to attempt suicide repeatedly. Just 4.3 percent of minors reported this precipitating factor, but 75.0 percent of these children had made prior attempts. There was relatively little difference by gender but preteens were more likely than their older counterparts to have made their attempt because of physical abuse.

The death of a family member or friend was associated with 3.8 percent of the attempts. Males were twice as likely as females to report this event, but there was no clear trend by age.

Suicidal behavior by a friend or relative was linked to 1 in 50 (2.0%) attempts and was reported more often by females than males. There was no clear pattern by age group.

Pregnancy was rarely associated with reported attempts; it was linked to just 0.6 percent of attempts. There was little difference by gender or age group.

Other risk factors were noted, including gang involvement, abandonment, sports injuries, parental drug abuse, family violence, and unemployment.

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

DATA SUMMARY

- Thirty-seven Oregonians under the age of 20 committed suicide in 2000.
- At the cusp of the millennium, Oregon 15- to 19-year-olds were less likely to die by suicide than were their counterparts a generation ago.

Youth reporting physical abuse were most likely to have made prior attempts and most likely to be admitted as an inpatient.

- Suicide attempts were reported more often for females than males.
- The number of reported attempts peaked for youth ages 15 to 16.
- Most attempts occurred in the youth's own home.
- Attempts were reported most often during spring months and on Mondays.
- The majority of attempts were made with drugs and other substances.
- Youth who attempted suicide were about equally likely to be treated and released as to be admitted as an inpatient.
- Family discord was the pre-eminent risk factor in youth suicide attempts.

ENDNOTES

1. Moving (rolling) rates are often used where rates based on rare events 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 given time period is divided by the sum of the population for the same time period. In Figure 1, for example, the data point shown for 1999 consists of a three-year average, 1997-1999. The next data point, for 2000, consists of data for 1998-2000.