

AMERICAN ACADEMY OF PEDIATRICS

Committee on Adolescence

Suicide and Suicide Attempts in Adolescents

ABSTRACT. Suicide is the third leading cause of death for adolescents 15 to 19 years old.¹ Pediatricians can help prevent adolescent suicide by knowing the symptoms of depression and other presuicidal behavior. This statement updates the previous statement² by the American Academy of Pediatrics and assists the pediatrician in the identification and management of the adolescent at risk for suicide. The extent to which pediatricians provide appropriate care for suicidal adolescents depends on their knowledge, skill, comfort with the topic, and ready access to appropriate community resources. All teenagers with suicidal symptoms should know that their pleas for assistance are heard and that pediatricians are willing to serve as advocates to help resolve the crisis.

The number of adolescent deaths from suicide in the United States has increased dramatically during the past few decades. In 1997, there were 4186 suicides among people 15 to 24 years old, 1802 suicides among those 15 to 19 years old, and 2384 among those 20 to 24 years old.¹ In 1997, 13% of all deaths in the 15- through 24-year-old age group were attributable to suicide.¹ The true number of deaths from suicide actually may be higher, because some of these deaths are recorded as "accidental."³

From 1950 to 1990, the suicide rate for adolescents in the 15- to 19-year-old group increased by 300%.⁴ Adolescent males 15 to 19 years old had a rate 6 times greater than the rate for females.¹ The ratio of attempted suicides to completed suicides among adolescents is estimated to be 50:1 to 100:1, and the incidence of unsuccessful suicide attempts is higher among females than among males.⁵ Suicide affects young people from all races and socioeconomic groups, although some groups seem to have higher rates than others. Native American males have the highest suicide rate, African American women the lowest. A statewide survey of students in grades 7 through 12 found that 28.1% of bisexual and homosexual males and 20.5% of bisexual and homosexual females had reported attempting suicide.⁶ The National Youth Risk Behavior Survey of students in grades 9 through 12 indicated that nearly one fourth (24.1%) of students had seriously considered attempting suicide during the 12 months preceding the survey, 17.7% had made a specific plan, and 8.7% had made an attempt.⁷

The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.
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Firearms, used in >67% of suicides, are the leading cause of death for males and females who commit suicide.⁸ More than 90% of suicide attempts involving a firearm are fatal because there is little chance for rescue. Firearms in the home, regardless of whether they are kept unloaded or stored locked up, are associated with a higher risk for adolescent suicide.^{9,10} Parents must be warned about the lethality of firearms in the home and be advised strongly to remove them from the premises.¹¹ Ingestion of pills is the most common method among adolescents who attempt suicide.

Youth, who seem to be at much greater risk from media exposure than adults, may imitate suicidal behavior seen on television.¹² Media coverage of a teenage suicide may lead to cluster suicides, additional deaths from suicides in youths within a 1- to 2-week period afterward.¹²⁻¹⁴

ADOLESCENTS AT INCREASED RISK

Although no specific tests are capable of identifying suicidal persons, specific risk factors exist. Adolescents at higher risk commonly have a history of depression, a previous suicide attempt, a family history of psychiatric disorders (especially depression and suicidal behavior), family disruption, and certain chronic or debilitating physical disorders or psychiatric illness.¹⁵ Alcohol use and alcoholism indicate high risk for suicide.¹⁶ Alcohol use has been associated with 50% of suicides.¹⁷ Living out of the home (in a correctional facility or group home) and a history of physical or sexual abuse are additional factors more commonly found in adolescents who exhibit suicidal behavior.¹⁸ Psychosocial problems and stresses, such as conflicts with parents, breakup of a relationship, school difficulties or failure, legal difficulties, social isolation, and physical ailments (including hypochondriacal preoccupation), commonly are reported or observed in young people who attempt suicide. These precipitating factors often are cited by youths as reasons for attempting suicide. Gay and bisexual adolescents have been reported to exhibit high rates of depression and have been reported to have rates of suicidal ideation and attempts 3 times higher than other adolescents. Studies of twins show that monozygotic twins show significantly higher concordance for suicide than dizygotic twins.¹⁶ Long-term high levels of community violence may contribute to emotional and conduct problems and add to the risk of suicide for exposed youth.¹⁹ Adolescent and parent questionnaires that cover those risk factors listed above, may be useful in

the office setting to assist in obtaining a complete history.²⁰

APPROACHING THE ADOLESCENT

All adolescents with symptoms of depression should be asked about suicidal ideation, and an estimation of the degree of suicidal intent should be made. No data indicate that inquiry about suicide precipitates the behavior. In fact, adolescents often are relieved that someone has heard their cry for help. For most adolescents, this cry for help represents an attempt to resolve a difficult conflict, escape an intolerable living situation, make someone understand their desperate feelings, or make someone feel sorry or guilty. Suicidal thoughts or comments should never be dismissed as unimportant. Adolescents must be told by pediatricians that their plea for assistance has been heard and that they will be helped.

Serious depression in adolescents may manifest in several ways. For some adolescents, symptoms may be similar to those in adults, with signs, such as depressed mood almost every day, crying spells or inability to cry, discouragement, irritability, a sense of emptiness and meaninglessness, negative expectations of self and the environment, low self-esteem, isolation, a feeling of helplessness, markedly diminished interest or pleasure in most activities, significant weight loss or weight gain, insomnia or hypersomnia, fatigue or loss of energy, feelings of worthlessness, and diminished ability to think or concentrate.²¹ However, it is more common for an adolescent with serious depression to exhibit psychosomatic symptoms or behavioral problems. Such a teenager may seek care for recurrent or persistent complaints, such as abdominal pain, chest pain, headache, lethargy, weight loss, dizziness and syncope, or other nonspecific symptoms.²² Behavioral problems that may be manifestations of masked depression include truancy, deterioration in academic performance, running away from home, defiance of authorities, self-destructive behavior, vandalism, alcohol and other drug abuse, sexual acting out, and delinquency.²³ Episodic despondency leading to self-destructive acts can occur in any adolescent, including high achievers. These adolescents may believe that they have failed or disappointed their parents and family and perceive suicide as their only option. Other adolescents may believe that suicide is a better option than life as they experience it.

One approach to initiate an inquiry into suicidal thoughts or concerns is to ask a general question, such as "Have you ever felt so unhappy or depressed that you thought about killing yourself or wished you were dead?" If the response is positive, the pediatrician should inquire about thoughts of death, thoughts of suicide, suicide plans (eg, method, time, and place), securing the available means (eg, guns and ropes), previous attempts (and whether the attempts were discovered), and the response of the family. These basic questions can help pediatricians construct an assessment of suicidal risk. In addition, they should assess individual coping resources, accessible support systems, and attitudes

of the adolescent and family toward intervention and follow-up.²⁴

Although confidentiality is important in adolescent health care, for adolescents at risk to themselves or others, confidentiality must be breached. Pediatricians need to inform the appropriate persons when they believe an adolescent is at risk of suicide. In all cases, determination of the sequence of events that preceded the threat, identification of current problems and conflicts, and assessment of the degree of suicidal intent must be completed.

MANAGEMENT OF THE SUICIDAL ADOLESCENT

Adolescents with a well-thought-out plan that includes method, place, time, and clear intent are at high risk. The degree of intent can be inferred from the actual and perceived lethality of the intended means. Use of firearms, for example, has a high degree of lethality and poor chance of rescue. An adolescent who takes pills in the presence of others, however, has a good chance of rescue (Table 1).²⁵ Even adolescents who initially may seem at low risk, joke about suicide, or seek treatment for repeated somatic complaints may be asking for help the only way they can. Their concerns should be assessed thoroughly and follow-up arranged for additional evaluation and treatment. For adolescents who seem to be at moderate or high risk for suicide or have attempted suicide, a mental health professional should be consulted immediately during the office visit. Options for immediate evaluation include hospitalization, transfer to an emergency department, or an appointment the same day with a mental health professional.

The safest course of action is hospitalization, placing the adolescent in a safe and protected environment. An inpatient stay will allow time for a complete medical and psychiatric or psychological evaluation and initiation of therapy in a controlled setting. The choice of hospital unit depends on available facilities in the area, health and mental health insurance, and managed care policies. Adolescent medicine units must be staffed to manage the medical and psychiatric needs of suicidal adolescents.²⁶ Proper medical intervention and treatment are essential for stabilization and management of patients' conditions. After the adolescent's condition has been stabilized medically, a comprehensive emotional and psychosocial assessment must be initiated before discharge. Inquiry should be made into the events that preceded the attempt, the adolescent's current problems, and the presence of current or previous psychiatric illness and self-destructive behavior. In addition to an in-depth psychological evaluation of the adolescent, family members should be interviewed to obtain additional information to help explain the adolescent's suicidal thoughts or attempt. This information includes detailed questions about the adolescent's medical, emotional, social, and family history with special attention to signs and symptoms of depression, stress, and substance abuse. With parental permission and adolescent assent,

TABLE 1. Examples of Adolescents at Low, Moderate, and High Risk for Suicide

Low risk
Took 5 ibuprofen tablets after argument with girlfriend
Impulsive; told mother 15 minutes after taking pills
No serious problems at home or school
Occasionally feels “down” but has no history of depression or serious emotional problems
Has a number of good friends
Wants help resolving problems and is no longer considering suicide after interview
Moderate risk
Suicidal ideation precipitated by recurrent fighting with parents and failing grades in school
Wants to “get back” at parents
Cut both wrists while at home alone; called friend 30 minutes later
Parents separated, changed school this semester, history of attention-deficit hyperactivity disorder
Symptoms of depression for the last 2 months, difficulty controlling temper
Binge drinking on the weekends
Answers all the questions during the interview, agrees to see a therapist if parents get counseling, will contact the interviewer if suicidal thoughts return
High risk
Thrown out of house by parents for smoking marijuana at school, girlfriend broke up with him last night, best friend killed in auto crash last month
Wants to be dead; sees no purpose in living
Took father’s gun; is going to shoot himself where “no one can find me”
Gets drunk every weekend and uses marijuana daily
Hates parents and school; has run away from home twice and has not gone to school for 6 weeks
Hospitalized in the past because he “lost it”
Does not want to answer many of the questions during the interview and hates “shrinks”

teachers and family friends also may provide useful information if confidentiality is not breached.

Intervention should be tailored to the adolescent’s needs. Adolescents with a responsive intact family, good peer relations and social support, hope for the future, and a desire to resolve conflicts may require only brief crisis-oriented intervention.²⁷ In contrast, adolescents who have made previous attempts, exhibit a high degree of intent to commit suicide, show evidence of serious depression or other psychiatric illness, are abusing alcohol and other drugs, and have families who are unwilling to commit to counseling are at high risk and may require psychiatric hospitalization.

All adolescents who attempt suicide need a comprehensive outpatient treatment plan before discharge. Specific plans are needed because compliance with outpatient therapy often is poor. Most adolescents examined in emergency rooms and referred to outpatient facilities fail to keep their appointments. This is especially true when the appointment is made with someone other than the family pediatrician or the person who performed the initial assessment.²⁸ Continuity of care is, therefore, of paramount importance. Pediatricians can enhance continuity and compliance by maintaining contact with suicidal adolescents even after referrals are made. All firearms should be removed from the home because adolescents may still find access to locked guns stored in the home.

Adolescents judged not to be at high risk for suicide should be followed up closely, referred for mental health evaluation in a timely manner, or both.

RECOMMENDATIONS

1. Pediatricians need to know the risk factors (eg, signs and symptoms of depression) associated with adolescent suicide and serve as a resource for parents, teachers, school personnel, clergy, and

community groups that work with youth about the issue of adolescent suicide.

2. Pediatricians should ask questions about depression, suicidal thoughts, and other risk factors associated with suicide in routine history-taking throughout adolescence.
3. During routine evaluations, pediatricians need to ask whether firearms are kept in the home and discuss with parents the risks of firearms as specifically related to adolescent suicide. Specifically for adolescents at risk of suicide, parents should be advised to remove guns and ammunition from the house.
4. Pediatricians should recognize the medical and psychiatric needs of the suicidal adolescent and work closely with families and health care professionals involved in the management and follow-up of youth who are at risk or have attempted suicide.
5. Pediatricians should become familiar with community, state, and national resources that are concerned with youth suicide, including mental health agencies, family and children’s services, crisis hotlines, and crisis intervention centers. Working relationships should be developed with colleagues in child and adolescent psychiatry, clinical psychology, and other mental health professions to manage the care of adolescents at risk for suicide optimally. Because mental and physical health services are often provided through different systems of care, extra effort is necessary to assure good communication, continuity, and follow-up.
6. Pediatricians should advocate for benefit packages in health insurance plans to assure that adolescents have access to preventive and therapeutic mental health services that adequately cover the treatment of clinically significant mental health disorders.

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REFERENCES

- Centers for Disease Control and Prevention/National Center for Health Statistics. *Death Rates From 72 Selected Causes by 5-Year Age Groups, Race, and Sex: United States, 1979–1997*. Atlanta, GA: Centers for Disease Control and Prevention/National Center for Health Statistics; 1999. Table 291A
- American Academy of Pediatrics, Committee on Adolescence. Suicide and suicide attempts in adolescents and young adults. *Pediatrics*. 1988; 81:322–324
- Committee on Adolescence, Group for the Advancement of Psychiatry. *Adolescent Suicide*. Washington, DC: American Psychiatric Press; 1996
- Centers for Disease Control and Prevention. Programs for prevention of suicide among adolescents youth adults. *Morb Mortal Wkly Rep CDC Surveill Summ*. 1994;43:1–7. No RR-6
- Husain SA. Current perspective on the role of psychological factors in adolescent suicide. *Psychiatr Ann*. 1990;20:122–127
- Remafedi G, French S, Story M, Resnick MD, Blum R. The relationship between suicide risk and sexual orientation: results of a population-based study. *Am J Public Health*. 1998;88:57–60
- Centers for Disease Control and Prevention. Youth risk behavior surveillance: United States, 1995. *Morb Mortal Wkly Rep CDC Surveill Summ*. 1996;45(SS-4):1–84
- Kachur SP, Potter LB, James SP, Powell KE. *Suicide in the United States: 1980–1992: Violence Surveillance*. Atlanta, GA: National Center for Injury Prevention and Control; 1995:12. Summary Series 1
- Brent DA, Perper JA, Allman CJ, et al The presence and accessibility of firearms in the home of adolescent suicides: a case-control study. *JAMA*. 1991;266:2989–2995
- American Academy of Pediatrics, Committee on Injury and Poison Prevention. Firearm injuries affecting the pediatric population. *Pediatrics*. 1992;89:788–790
- American Academy of Pediatrics, Committee on Adolescence. Firearms and adolescents. *Pediatrics*. 1992;89:784–787
- Bollen KA, Phillips DP. Imitative suicides: a national study of the effects of television news stories. *Am Sociol Rev*. 1982;47:802–809
- Gould MS, Wallenstein S, Kleinman M. Time-space clustering of teenage suicides. *Am J Epidemiol*. 1990;131:71–78
- Phillips DP, Carstenson LL. Clustering of teenage suicides after television news stories about suicide. *N Engl J Med*. 1986;315:685–689
- Bennett DS. Depression among children with chronic medical problems: a meta-analysis. *J Pediatr Psychol*. 1994;19:149–169
- Roy A, Segal NL, Centerwall BS, Robinette CD. Suicide in twins. *Arch Gen Psychiatry*. 1991;48:29–32
- Frances RJ, Franklin J, Flavin DK. Suicide and alcoholism. *Am J Drug Alcohol Abuse*. 1987;13:327–341
- Hodgman CH, McAnarney ER. Adolescent depression and suicide: rising problems. *Hosp Pract (Off Ed)*. 1992;27:73–76,81,84–85
- Cooley-Quille MR, Turner SM, Beidel DC. Emotional impact of children's exposure to community violence: a preliminary study. *J Am Acad Child Adolesc Psychiatry*. 1995;34:1362–1368
- Remafedi G, Farrow JA, Deisher RX. Risk factors for attempted suicide in gay and bisexual youth. *Pediatrics*. 1991;87:869–875
- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 4th ed. Washington, DC: American Psychiatric Association; 1994
- Wolraich ML, Felice ME, Drotar D, eds. *The Classification of Child and Adolescent Mental Diagnoses in Primary Care: Diagnostic and Statistical Manual for Primary Care (DSM-PC) Child and Adolescent Version*. Elk Grove Village, IL: American Academy of Pediatrics; 1996
- McIntire MS, Angle CR, Wikoff RL, Schlicht ML. Recurrent adolescent suicidal behavior. *Pediatrics*. 1977;60:605–608
- Gispert M, Wheeler K, Marsh L, Davis MS. Suicidal adolescents: factors in evaluation. *Adolescence*. 1985;20:753–762
- Jellinek MS, Snyder JB. Depression and suicide in children and adolescents. *Pediatr Rev*. 1998;19:255–264
- Marks A. Management of the suicidal adolescent on a nonpsychiatric adolescent unit. *J Pediatr*. 1979;95:305–308
- Hodgman CH, Roberts FN. Adolescent suicide and the pediatrician. *J Pediatr*. 1982;101:118–123
- Hawton K. *Suicide and Attempted Suicide Among Children and Adolescents*. Beverly Hills, CA: Sage Publications; 1986

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