

**Practice Parameter for the Assessment and Treatment of
Children and Adolescents with Suicidal Behavior**

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1 **ABSTRACT**

2 These guidelines review what is known about the epidemiology, causes,
3 management, and prevention of suicide and attempted suicide in young people. Detailed
4 guidelines are provided concerning the assessment and emergency management of the
5 children and adolescents who present with suicidal behavior. The guidelines also present
6 suggestions on how the clinician may interface with the community. Crisis hotlines,
7 method restriction, educational programs, and screening/ case-finding suicide-prevention
8 strategies are examined, and the clinician is advised on media counseling. Intervention in
9 the community after a suicide, minimization of suicide contagion or imitation, and the
10 training of primary care physicians and other gatekeepers to recognize and refer the
11 potentially suicidal child and adolescent are discussed. **Keywords:** suicide, children and
12 adolescent, suicide attempts, practice guidelines, suicide prevention, suicidal ideation,
13 mood disorders.

14
15
16 **INTRODUCTION**

17 Suicidal behavior is a matter of great concern for clinicians who deal with the
18 mental health problems of children and adolescents. The incidence of suicide attempts
19 reaches a peak during the mid-adolescent years, and mortality from suicide, which
20 increases steadily through the teens, is the third leading cause of death at that age.
21 Clinicians need to know how to identify those at greatest risk for suicide from among the
22 large number of suicide attempters who have a benign prognosis; how to provide
23 treatment for the suicidal patient; how to advise and counsel the child, adolescent, and
24 parental survivors of individual suicides; and how to provide expert consultation to
25 educational and public health authorities on appropriate and inappropriate directions for
26 suicide-prevention programs. The parameters were written to aid clinicians in the
27 assessment and treatment of children and adolescents exhibiting suicidal behavior or
28 harboring suicidal ideation.

29
30 **EXECUTIVE SUMMARY**

31 This summary provides an overview of the assessment and treatment
32 recommendations contained in the Practice Parameter for the Assessment and Treatment
33 of Children and Adolescents with Suicidal Behavior. This summary includes many of the
34 most important points and recommendations that are in these practice guidelines.
35 However, the treatment and assessment of suicidal patients requires the consideration of
36 many important factors that cannot be conveyed fully in a summary, and the reader is
37 encouraged to review the entire document. Each recommendation in the executive
38 summary is identified as falling into one of the following categories of endorsement,
39 indicated by an abbreviation in brackets following the statement. These categories
40 indicate the degree of importance or certainty of each recommendation.

41
42 [MS] “Minimal Standards” are recommendations that are based on substantial
43 empirical evidence (such as well controlled, double-blind trials) or overwhelming clinical
44 consensus. Minimal standards are expected to apply more than 95 percent of the time,
45 i.e., in almost all cases. When the practitioner does not follow this standard in a particular
46 case, the medical record should indicate the reason.

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1 [CG] “Clinical Guidelines” are recommendations that are based on empirical
2 evidence (such as open trials, case studies) and/or strong clinical consensus. Clinical
3 guidelines apply approximately 75 percent of the time. These practices should always be
4 considered by the clinician, but there are exceptions to their application.

5 [OP] “Options” are practices that are acceptable, but not required. There may be
6 insufficient empirical evidence to support recommending these practices as minimal
7 standards or clinical guidelines. In some cases they may be the perfect thing to do, but in
8 other cases should be avoided. If possible, the practice parameter will explain the pros
9 and cons of these options.

10 [NE] “Not Endorsed” refers to practices that are known to be ineffective or
11 contraindicated.

12 13 SUICIDE

14 Suicide, exceedingly rare before puberty, becomes increasingly frequent through
15 adolescence. Approximately two thousand U.S. adolescents commit suicide each year.

16 The factors that predispose to completed suicide are many and include pre-
17 existing psychiatric disorders and both biological and social-psychological facilitating
18 factors. The overwhelming proportion of adolescents who commit suicide (over 90
19 percent) suffered from an associated psychiatric disorder at the time of their death. Over
20 half had suffered from a psychiatric disorder for at least two years.

21 Stress events often precede adolescents’ suicides, including a loss of a romantic
22 relationship, disciplinary troubles in school or with the law, or academic or family
23 difficulties. These stresses may ensue from the underlying mental disorder itself (e.g.,
24 trouble with the law) or they may be normative outcomes of uncontrollable events (e.g., a
25 death in the family) with which the adolescent with a mental disorder may not be able to
26 cope. An adolescent with an underlying mental disorder may be faced with a greater
27 number of stressful events than the average adolescent. Or he may perceive the events
28 that occur as more stressful.

29 Suicide is much more common in adolescent and young-adult males than females
30 (the ratio grows from 3:1 in the rare prepubertal suicides to approximately 5.5:1 in
31 fifteen- to twenty-four-year-olds), but many of the risk factors are the same for both
32 sexes. Mood disorders, poor parent/child communication, and a previous suicide attempt
33 are risk factors for suicide in both boys and girls, although a previous suicide attempt is
34 more predictive in males. Substance and/or alcohol abuse significantly increase the risk
35 of suicide in teens aged sixteen and older. Family pathology and a history of family
36 suicidal behavior may also increase risk and should be investigated.

37 African-Americans currently have a lower rate of suicide than Whites, but the
38 suicide rate of African-American adolescent and young adult males has been rising
39 rapidly. Native American and Alaskan Native youth have historically had a very high rate
40 of suicide. Hispanic youth attempted-suicide rates are greater than those of white and
41 African-American youth. Clinicians should consider the cultural background of a suicidal
42 youth and assess cultural attitudes in the child’s community. However, ethnic differences
43 in the suicide rate may reflect contagion in isolated groups rather than cultural
44 differences.

45

1 SUICIDAL IDEATION

2 Suicidal thoughts are common in children and adolescents of both genders and are
3 by no means always associated with other features of psychopathology. They usually
4 come to clinical attention when enunciated as threats.

5 Disruptive disorders increase the risk of suicidal ideation in children twelve years
6 old and under, and substance use or separation anxiety may provoke adolescent ideators
7 of both sexes to attempt suicide. Mood and anxiety disorders increase the risk of suicidal
8 ideation. Panic attacks are a risk factor for ideation or attempt in females, while
9 aggressiveness increases the risk of suicidal ideation or attempt in males. Adolescent
10 suicide attempters may differ from ideators in having more severe or enduring
11 hopelessness, isolation, suicidal ideation, and reluctance to discuss suicidal thoughts.

12
13 ATTEMPTED SUICIDE

14 Mood disorders (particularly early-onset major depressive disorder), anxiety
15 disorders, substance abuse, and runaway behavior independently increase the risk of
16 suicide attempts in both sexes. Suicide attempts are more common in girls than boys
17 (approximately 1.6:1).

18 Suicide attempts are considerably less common than suicidal ideas, but they are
19 the presenting complaint in a sizeable proportion of adolescents referred to mental health
20 professionals. It is estimated that, each year, approximately two million U.S. adolescents
21 attempt suicide, and almost seven hundred thousand receive medical attention for their
22 attempt.

23 Teen suicide attempters are much more likely than those who only ideate to have
24 associated psychopathology, especially a mood disorder, but the attempts often occur in
25 the context of a relatively brief adjustment reaction.

26 Having made a previous suicide attempt greatly increases the risk of a boy
27 eventually committing suicide, but the predictive effect in females is less substantial.
28 Only half of all suicide completers have made a known suicide attempt before their death,
29 however our information on previous attempts remains incomplete, as many attempts go
30 unreported. Gay, lesbian, and bisexual youth are at increased risk for suicide attempts,
31 often having multiple risk factors (i.e., depression, prior suicide attempts, substance
32 abuse, sexual victimization, family conflict, and ostracism at school), as are adolescents
33 who have been victims of childhood sexual or physical abuse.

34 Even the most skilled clinician can find it difficult to differentiate between benign
35 and ominous suicidal behavior. Many adolescents who have made a medically serious
36 attempt will never do so again, while others who have made what seemed like only a
37 mild “gesture” may eventually commit suicide. The term “gesture,” used by some
38 clinicians to denote a nonlethal, self-destructive action that is deemed a cry for help or a
39 manipulation without serious intent, is therefore misleading, because it minimizes the
40 potential risk for future suicidal behavior. One cannot gauge future suicidal behavior.
41 However, research has provided some broad indicators about risk factors and the
42 assessment of attempters (see Table 1 and Table 2) that need to be considered by all
43 clinicians [MS].

44
45 **[INSERT TABLE 1 ABOUT HERE]**
46

1 ASSESSMENT

2 Assessment of suicidal patients requires an evaluation of the suicidal behavior
3 and determination of risk for death or repetition, as well as an assessment of the
4 underlying diagnoses or promoting factors.

5

6 Identification of Risk

7 Clinicians should be aware of which adolescent suicide attempters are at greatest
8 risk for later suicide (see Table 2) [MS]. These are older (sixteen- to nineteen-year-old)
9 male adolescents; adolescents of either gender, regardless of age, with a current mental
10 disorder or disordered mental state, such as depression, mania or hypomania, or mixed
11 states, especially when complicated by comorbid substance abuse, irritability, agitation,
12 or psychosis. Attempters who have made prior suicide attempts, used a method other than
13 ingestion or superficial cutting, and those who still want to die are also at higher risk.

14 Clinicians should ascertain the suicidality of depressed adolescents (i.e., whether
15 and how often they think about suicide and whether they have ever attempted suicide). If
16 suicidal ideation or recent suicidal behavior is present in a depressed teen, they should
17 continue to be monitored [MS].

18 Assessment information should always be drawn from several sources, including
19 child or adolescent, parents or guardians, school reports, and any other individuals close
20 to the child. Structured or semi-structured suicide scale questionnaires, whether delivered
21 by the clinician or self-completed by the child or adolescent, have limited predictive
22 value. They may complement but should never take the place of a thorough assessment or
23 substitute for any aspect of assessment.

24

25

[INSERT TABLE 2 ABOUT HERE]

26

27 TREATMENT

28 Treatment must encompass the acute management of suicidal behavior as well as
29 treatment of associated mental disorders.

30

31 Acute Management

32 Emergency room and other crisis staff should establish a relationship with the
33 suicidal individual and family and establish the importance of treatment [MS].

34 Although there have been no randomized controlled trials to determine whether
35 hospitalizing high-risk suicide attempters saves lives, clinicians should be prepared to
36 admit suicide attempters who express a persistent wish to die or who have a clearly
37 abnormal mental state[MS]. Inpatient treatment should continue until their mental state or
38 level of suicidality has stabilized [MS].

39 Regardless of the apparent mildness of the patient’s suicidal behavior, the
40 clinician must obtain information from a third-party. Discharge can be considered if the
41 clinician is satisfied that adequate supervision and support will be available over the next
42 few days, and if a responsible adult has agreed to “sanitize” the environment by securing
43 or disposing of potentially lethal medications and firearms [MS].

44 The most common method used by adolescents to commit suicide in the United
45 States is with a firearm. Ingestion of medication is the most common method adolescents
46 use to attempt suicide. Availability and presence in the home of firearms and lethal

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1 medication must be determined during assessment, and parents must be explicitly told to
2 remove firearms and lethal medication [MS]. It is valuable for the clinician to warn the
3 adolescent (and their parents) about the dangerous disinhibiting effects of alcohol and
4 other drugs [CG].

5 The value of “no-suicide contracts,” in which the child or adolescent agrees not to
6 engage in self-harming behavior and to tell an adult if he or she is having suicidal urges,
7 is not known. The child or adolescent might not be in a mental state to accept or
8 understand the contract, and both family and clinician should know not to relax their
9 vigilance just because a contract has been signed.

10 If possible, an appointment should be scheduled for the child or adolescent to be
11 seen for a fuller evaluation before discharge from the emergency room. If this is not
12 possible, a telephone contact for parent or other caretaker should be obtained and a
13 procedure set up clinical staff, if they have not been contacted by the parent with in a
14 reasonable period of time, to themselves initiate the contact [MS].

15 The clinician treating the suicidal child or adolescent during the days following an
16 attempt should be available to the patient and family (for example, receive and make
17 phone calls outside of therapeutic hours) or have adequate physician coverage if away
18 [MS], have experience managing suicidal crises [MS], and have support available for him
19 or herself [CG].

20 Once a therapeutic alliance is established and the adolescent attends the first
21 treatment sessions, he or she is more likely to continue treatment.

22 23 Psychotherapies

24 Psychotherapy, an important component of treatment for the mental disorders
25 associated with suicidal behavior, should be tailored to a child’s or adolescent’s
26 particular need [MS]. Cognitive-behavioral therapy (CBT), interpersonal therapy (ITP-
27 A), dialectical behavioral therapy (DBT), psychodynamic therapy, and family therapy are
28 all options [OP].

29 30 Psychopharmacology

31 As with psychotherapies, psychopharmacology to treat suicidal behavior should
32 be tailored to a child or adolescent’s placement specific needs. Lithium greatly reduces
33 the rate of both suicides and suicide attempts in adults with bipolar disorder.

34 Discontinuing lithium treatment in bipolar patients is associated with an increase in
35 suicide morbidity and mortality.

36 Selective serotonin reuptake inhibitors reduce suicidal ideation and suicide
37 attempts in non-depressed adults with cluster-B personality disorders. They are safe in
38 children and adolescents, have low lethality, and are effective in treating depression in
39 non-suicidal children and adolescents. There have been some reports that SSRIs may
40 have a disinhibiting effect (especially in patients with SSRI-induced akathisia) and
41 increase suicidal ideation in a small number of adults not previously suicidal. Further
42 controlled research is necessary to determine whether there is an association in children
43 and adolescents. However, it would be prudent to carefully monitor children and
44 adolescents on SSRIs to insure that new suicidal ideation or akathisia are noted [MS].

45 Tricyclic antidepressants should not be prescribed for the suicidal child or
46 adolescent as a first line of treatment [NE]. They are potentially lethal, because of the

1 small difference between therapeutic and toxic levels of the drug, and have not been
2 proven effective in children or adolescents.

3 Other medications that may increase disinhibition or impulsivity, such as the
4 benzodiazapines and Phenobarbital, should be prescribed with caution [OP]. Any and all
5 medications prescribed to the suicidal child or adolescent must be carefully monitored by
6 a third party and any change of behavior or side-effects immediately reported [MS].

7
8 PREVENTION

9 Public health approaches to suicide prevention have targeted the suicidal child or
10 adolescent, the adults who interact with them, their friends, pediatricians, and the media.

11 Teens may be made aware of the existence of crisis hot lines [OP]. Although
12 widely used, early studies, hampered by methodological deficiencies, failed to show that
13 hot lines reduce the incidence of suicide. But it would be wise to assume that their value
14 remains untested. Research has uncovered some hot-line deficiencies, but new studies are
15 needed to see if correcting these problems can increase their effectiveness.

16 Public health measures, such as restricting young people's access to firearms may
17 result in a short-term reduction in the rates of suicide, but there is not yet evidence that
18 this effect would be lasting [OP]. Raising the minimum legal drinking age for young
19 adults appears to reduce the suicide rate in the affected age group.

20 Suicide-awareness programs in schools frequently minimize the role of mental
21 illness and, although designed to encourage self-disclosure by students or third-party
22 disclosure by their friends, have not been shown to be effective either in reducing
23 suicidal behavior or increasing help-seeking behavior.

24 Because curriculum-based suicide awareness programs disturb some high risk
25 students, a safer approach might be to focus on the clinical characteristics of depression
26 or other mental illnesses that predispose to suicidality. In the absence of evidence to the
27 contrary, talks and lectures about suicide to groups of children and adolescents drawn
28 from regular classes should be discouraged [NE]. This is because of their propensity to
29 activate suicidal ideation in disturbed adolescents whose identity is not usually known to
30 the instructor. Screening or suicide education programs for teens that do not include
31 procedures to evaluate and refer identified ideators or attempters are not endorsed [NE].
32 Direct screening programs may identify those with underlying risk factors to a clinician
33 for further evaluation [OP].

34 Primary practitioners, counselors, or others who may lack the time, resources, or
35 training to evaluate a child's or teen's mental state should make use of self-completion
36 questionnaires to screen for depression, suicidal preoccupations, and previous suicidal
37 behavior in their office [CG]. There is ample evidence that teens in mid to late
38 adolescence—the group that is at greatest risk for suicide attempt and completion—will,
39 if asked directly, reveal this information. This practice can be especially recommended to
40 family practitioners, pediatricians, school counselors, juvenile-justice professionals, and
41 psychologists who wish to survey their populations for teens at high risk for suicide.
42 Those identified as being at risk should be referred for further evaluation and treatment,
43 if necessary, and receive support and follow-up (i.e., phone calls, case manager if
44 available) during the transition period.

45 Clinicians engaged in public health practice should be able to advise media
46 reporters and editors on the dangers of excessive coverage of individual suicides [OP].

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1 Finally, primary care physicians and gatekeepers should be trained to recognize
2 risk factors for suicide and suicidal behavior and, when necessary, refer to a mental
3 health clinician [CG].
4

5 POSTVENTION

6 After a suicide, the relative, friends, and teachers of the child or adolescent who
7 committed suicide may benefit from intervention to facilitate grieving, reduce guilt and
8 depression, and decrease the effects of guilt and trauma. There may also be a call to
9 intervene to minimize the risk of imitative or copy-cat suicides, but there is no agreement
10 about how this should be done [CG].
11

12 LITERATURE REVIEW

13 The literature on child and adolescent suicidal behavior has burgeoned since the
14 early 1980s. Journal articles and books published from 1980 through February 2000 were
15 reviewed via a National Library of Medicine search of the topics “suicide” and “suicidal
16 behavior” in children and adolescents. There were over twenty thousand publications
17 listed in PsychInfo, Healthstar, and Medline during this period. Only the most relevant
18 articles are cited due to space constraints. Key references are marked with an asterisk
19 under References. The authors also drew from their clinical knowledge and experience,
20 writing, and research in this subject area.
21

22 HISTORICAL REVIEW

23 Until the late 1950s, the literature on suicide was confined to case reviews,
24 reviews of the demography of suicide drawn from death certificate data, and speculation
25 about the dynamics of the behavior. The late 1950s saw the first systematic psychological
26 autopsy study that was carried out by Eli Robins and his colleagues at Washington
27 University, St. Louis (1959), followed by similar studies in other countries using the
28 same techniques. These studies formed a milestone because they gave evidence for the
29 importance of psychiatric disorder as the proximal cause of most suicides.

30 The 1960s saw the start of a period of increasing young male suicides that was to
31 continue for three decades (National Center for Health Statistics, 1999). Although the
32 period was marked by a growth in the suicide prevention movement in the United States,
33 with its emphasis on crisis intervention services, relatively little informative research
34 emerged.

35 By the early 1980s, the suicide rate in white, male teenagers had more than
36 doubled (National Center for Health Statistics, 1999) and this attracted public attention.
37 The occurrence of several clusters of suicides among children and adolescents alarmed
38 the general public and stimulated efforts to develop methods of understanding and
39 preventing youth suicide. A task force of clinical and research experts was convened by
40 the U.S. Department of Health and Human Services of the Public Health Service to
41 develop policies to reduce rates of youth suicide, and its report was published in 1989
42 (Alcohol, Drug Abuse, and Mental Health Administration). By that time, systematic
43 research was being undertaken in several different centers, and much of the research on
44 suicide in the 1980s and 1990s focussed on suicide in individuals under the age of
45 nineteen. Epidemiological and phenomenological studies flourished; efforts at suicide
46 prevention among high school students proliferated, while at the same time substance

1 abuse rates—almost certainly an important contributor to suicide in this age group—
2 declined.

3 It is clear that we have a good deal of substantive information on the
4 characteristics of suicide victims, less about child and adolescent attempters, and little
5 systematic evidence-based knowledge about the optimal treatment of the suicidal child or
6 adolescent. There have been very few randomized control trials designed to assess
7 different forms of treatment. As a result, many of the suggestions for clinical
8 management that are laid out in these guidelines are based on the experience and
9 observations of clinicians who have treated this common condition. The clinician should
10 be clear that this is a situation in which there is an absence of research and not one in
11 which adequate research has produced ambiguous or negative findings. It is the
12 impression of many clinicians, that the majority of suicide attempters and their families
13 benefit from straightforward interventions dictated by the child or adolescent’s mental
14 state and family circumstances.

15
16 **SUICIDE**

17
18 **EPIDEMIOLOGY**

19
20 **Age**

21 In 1997, the age-specific mortality rate from suicide for ten- to fourteen-year-olds
22 was 1.6 per 100,000 (National Center for Health Statistics, 2000). Although ten- to
23 fourteen-year-olds represented 7 percent of the U.S. population, the 330 child suicides
24 that occurred among them represented only 1 percent of all suicides, with most deaths in
25 this group occurring in youth aged twelve to fourteen.

26 In 1997, the suicide mortality rate for fifteen- to nineteen-year-olds was 9.5 per
27 100,000 (National Center for Health Statistics, 2000). That is about six times as high as
28 in the younger age group. The suicide rate among boys was 15.2 per 100,000 and among
29 girls 3.4 per 100,000. The proportion of suicides that occur in this age group (6.6 percent
30 of the general population) approaches the proportion of this age group in the general
31 population (6 percent).

32 In 1997, the suicide mortality rate for twenty- to twenty-four-year-olds was 13.6
33 per 100,000 (National Center for Health Statistics, 2000). This age group represents 7
34 percent of the total population, but accounts for 8 percent of all suicides.

35 Suicide rates (1997) in childhood and adolescence, grouped by different gender
36 and ethnic groups, are shown in Figure 1. Overall, approximately two thousand U.S.
37 adolescents (ages thirteen to nineteen) commit suicide each year (National Center for
38 Health Statistics, 2000).

39
40 **Gender**

41 In the United States the ratio of male to female suicide in young children is
42 approximately 3:1, but thereafter the rate increases rapidly for boys and only slightly for
43 girls, so that among fifteen- to nineteen-year-olds it is 4.5:1, and among twenty- to
44 twenty-four-year-olds it is over 6:1 (National Center for Health Statistics, 2000).

45

1 [INSERT FIGURE 1 ABOUT HERE]

2
3 Secular Changes

4 During the three decades between the early 1960s and the late 1980s, the suicide
5 rate among fifteen- to nineteen-year-old males increased threefold. The increase was not
6 universal, and there was little change in the female rate. While the rate among ten- to
7 fourteen-year-olds (National Center for Health Statistics, 1999) has doubled since 1979,
8 the rate is very low, so large proportionate increases can result from a very small increase
9 in cases (see Figure 2 for details).

10 Teen suicide rates have increased for whites and African-American males since
11 the early 1960s (National Center for Health Statistics, 1999). The rate among whites
12 reached a peak in 1987 and has since declined. The African-American male suicide rate
13 increased dramatically after 1986, but since 1994 it too has declined. The fluctuations in
14 the suicide rate appear to be real, rather than due to any methodological artifact (e.g., one
15 due to changes in reporting practices), because the rate of undetermined (whether suicidal
16 or accidental) deaths changed in parallel.

17
18 [INSERT FIGURE 2 AROUND HERE]

19
20 Suggested reasons for the increase in suicidal behavior among teenage boys are
21 increased availability of firearms (Boyd and Moscicki, 1986; Brent et al., 1991) and
22 increased substance use in the youth population (Brent et al., 1987). Brent found that
23 firearms were twice as likely to be found in the homes of adolescent suicide victims than
24 in the homes of attempters or psychiatric controls (Brent et al., 1991), and Brent and
25 Kellermann found that firearms were significantly more likely to be found in the homes
26 of those who completed suicide than in neighborhood controls (Brent et al., 1993c;
27 Kellermann et al., 1992). However, it is not known whether, in certain communities,
28 firearm ownership is independently associated with other risk factors for suicide, and the
29 findings from Brent's studies in the Pittsburgh area have not been replicated with
30 adolescents elsewhere or in other countries.

31 Loaded guns were particularly potent risk factors for the small number of suicides
32 without diagnosed psychopathology (Brent et al., 1993b; Kellermann et al., 1992). Laws
33 restricting access to firearms are associated with a significant reduction in unintentional
34 firearm deaths in youth under fifteen, but the change in homicides and suicides is
35 inconsistent (Cummings et al., 1997a; Loftin et al., 1991).

36 Although the rate of suicide by firearm increased more than suicide by other
37 methods (Boyd and Moscicki, 1986; Brent et al., 1987), suicide rates increased markedly
38 in many other countries in Europe, in Australia, and in New Zealand, where suicide by
39 firearms is rare. In New Zealand, for example, there has been an alarming increase in
40 hanging. Therefore, there may be some other factor at play in the worldwide increase in
41 young male suicides. Although it is possible, it seems implausible that different
42 mechanisms should be coincidentally operating to promote the almost universally
43 observed phenomenon of increased risk of male youth suicide.

44 The reasons offered for the recent decline in suicide rates include lowered
45 substance- and alcohol-use rates among the young (Centers for Disease Control, 1998)

1 and greatly increased prescribing of antidepressants to depressed individuals, with the
2 largest increase in children, adolescent, and young adult populations (Olfson et al., 1998).

3
4 Geography

5 Suicide rates in the United States are highest in the western states and Alaska and
6 lowest in the southern, north-central, and northeastern states. The ratio of white to
7 African-American rates is greatest in the South (Shaffer et al., 1994). Although regional
8 discrepancies between African Americans and whites are diminishing, the lowest rates
9 for both African-Americans and white suicides remain in the Deep South and the
10 Northeast (Shaffer et al., 1994).

11
12 Methods

13 Firearms are the most common method by which Americans of all ages,
14 ethnicities, and genders commit suicide. However, there are some significant differences
15 between genders in the use of other methods. From 1980 to 1995, firearm suicides
16 increased among young males, with the greatest proportional increase being among
17 African-American teenage males (300-percent increase). The white teen suicide by
18 firearm increase was 29 percent (National Center for Health Statistics, 1999).

19
20 While Brent (1987) found that autopsies of teens who committed suicide by
21 firearm were five times as likely to reveal detectable blood-alcohol levels than those of
22 teens who employed other suicide methods, this finding was not replicated in the New
23 York Teen Suicide Study (Shaffer et al., unpublished). In the same vein, specific links
24 between method choice and type of psychopathology (i.e., alcohol abuse) have not been
25 shown.

26 The methods used to commit suicide show great geographic variation. This may
27 reflect availability. For example, in the Northeast United States, an area with strong
28 firearm-control laws, firearms are used more often in rural areas, where, presumably,
29 more firearms are available for sporting purposes; jumping from a height is more
30 prevalent in urban areas, with their tall buildings, while asphyxiation by carbon
31 monoxide exhaust is most common in suburban areas where adolescents have access to a
32 car and garage.

33 Ingestions account for approximately 16 percent of fifteen- to twenty-four-year-
34 old female suicides, but for only 2 percent of suicides in males that age (NCHS, 2000).

35
36 CLINICAL CHARACTERISTICS OF TEENS WHO COMMIT SUICIDE

37 *Completed suicide* occurs most commonly in older adolescents, but can also occur
38 in children as young as six (see Figure 1). Psychological-autopsy studies (Brent et al.,
39 1999; Marttunen, 1991; Shaffer et al., 1996a) show that about 90 percent of adolescent
40 suicides occur in individuals with a pre-existing psychiatric disorder. In approximately
41 half of these, the psychiatric disorder has been present for two or more years. The most
42 common forms of psychiatric disorder found in completed suicides are: 1) some form of
43 mood disorder, which in boys is often comorbid with conduct disorder or substance
44 abuse; and 2) substance and/or alcohol abuse, particularly in boys over age fifteen.
45 Comorbidity between different disorders is common. Many children and adolescents who
46 committed suicide were notably irritable, impulsive, volatile, and prone to outbursts of

1 aggression. However, this pattern of behavior is by no means universal. Anxious children
2 without comorbidity may have shown no overt signs of disturbance, were often excellent
3 students, and were well liked by peers. The death of such teenagers often comes as a
4 great surprise to their relatives and friends, because they were known to be such “good”
5 young people. While perfectionism has been proposed as a risk factor for suicidal
6 ideation (Hewitt et al., 1997), recent studies have failed to show that perfectionism, as
7 distinct from anticipatory anxiety, is an independent predictor of suicide.

8 Although some adolescents—predominantly girls suffering from a major
9 depressive disorder—appear to have thought about suicide for some time and will often
10 have made some preparation for their death, most adolescent suicides appear to be
11 impulsive (Lucas et al., 1995). The suicide is often preceded by a stress event, such as
12 getting into trouble at school or with a law-enforcement agency; a ruptured relationship
13 with a boyfriend or a girlfriend; or a fight among friends. In many instances, these stress
14 events can be seen as a byproduct of an underlying mental disorder.

15 It also appears that a suicide can be precipitated—in presumably already suicidal
16 youth—by exposure to news of another person’s suicide or by reading about or viewing a
17 suicide portrayed in a romantic light in a book, magazine, or newspaper (Bollen and
18 Philips, 1982; Gould and Shaffer, 1986; Hafner and Schmidtke, 1989).

19 About a third of suicides have made a previous known suicide attempt (Brent et
20 al., 1999; Shaffer et al., 1996a). Previous attempts are more common in girls and among
21 suicides suffering from a mood disorder at the time of their death. Suicide must be
22 distinguished from autoerotic asphyxia, which is induction of oxygen deficiency to
23 enhance sexual excitement and orgasm (Johnstone and Huws, 1997). However, autoerotic
24 deaths in teenagers are rare (Shaffer et al., 1996a). When autoerotic deaths do occur, the
25 victims often have other forms of psychopathology, such as depression and substance
26 abuse (Sheehan and Garfinkel, 1988). It is possible, therefore, that some autoerotic deaths
27 are misclassified suicides.

28 Most suicide pacts occur between married couples and/or other family members.
29 They are most common in the middle-aged and elderly population (Brown and
30 Barroclough, 1997) and are very uncommon in young people. Shaffer et al. (1996a) noted
31 only one suicide pact in 140 consecutive suicides occurring in the New York/New
32 Jersey/Western Connecticut area over a period of two years.

34 RISK FACTORS FOR SUICIDE

36 Psychiatric Disorders

37 Controlled studies of completed suicide suggest similar risk factors for boys and
38 girls (Brent, 1999; et al., Shaffer et al., 1996a), but with marked differences in their
39 relative importance (Shaffer et al., 1996a).

40
41 *Girls.* The most significant risk factor is the presence of major depression, which,
42 in some studies, increases the risk of suicide twenty-fold (Shaffer et al., 1996a). The next
43 most important risk factor is a previous suicide attempt that increases the risk
44 significantly.

45 *Boys.* A previous suicide attempt is the most potent predictor, increasing the rate
46 over thirty-fold (Brent et al., 1999; Shaffer et al., 1999). It is followed by depression,

1 substance abuse (alcohol or drugs), and disruptive behavior (Brent et al., 1993b; Shaffer
2 et al., 1996a).

3 Disruptive disorders are common in male teens who commit suicide. In the New
4 York (Shaffer et al., 1996a) and Pittsburgh (Brent et al., 1999) studies, as many as a third
5 of male suicides had evidence of a conduct disorder. The disruptive disorder was
6 commonly comorbid with a mood, anxiety, or substance-abuse diagnosis. A number of
7 mechanisms may account for the associations, including early deprivation or other
8 childhood experiences that predispose to both depression and antisocial behavior, a
9 temperamental predisposition to violent or impulsive behavior, or the secondary
10 consequences of the numerous stresses that often occur in the lives of young people with
11 a disruptive disorder.

12 Although the rate of suicide is greatly increased in schizophrenia, because of the
13 rarity of the condition it accounts for very few suicides in the child and adolescent age
14 group. However, mental health professionals who care for individuals with schizophrenia
15 should be aware of their greater risk for suicide.

16 Psychosocial Stressors

17 Stressful life events often precede a suicide and/or suicide attempt (de Wilde et
18 al., 1992; Gould et al., 1996). They are rarely a sufficient cause in suicide, and their
19 importance lies in their action as precipitating factors in young people who are at risk by
20 virtue of their psychiatric condition.

21 Controlled studies (Gould et al., 1996; Hollis, 1996) indicate that low levels of
22 communication between parents and children may act as a significant risk factor. While
23 family discord, lack of family warmth, and disturbed parent-child relationship are
24 commonly associated with child and adolescent psychopathology (violent behavior,
25 mood disorder, alcohol and substance-abuse disorders) (Brent et al., 1994b; Pfeffer, et al.,
26 1994), these factors do not play an especially important role in suicide (Gould et al.,
27 1996).

28 Cultural Factors

29 Until recent years, suicide was much more common among whites than among
30 African-Americans at all ages. However, since 1987, the difference in rates between
31 young African Americans and whites has narrowed (Shaffer, Gould and Hicks, 1994).
32 This is because the suicide rate in African-American and other minority males has
33 increased rapidly, while the rate among whites has been steady or has declined. The
34 suicide rates for male fifteen- to nineteen-year-olds in 1986 were 18.0 per 100,000 for
35 whites and 7.1 per 100,000 for African Americans; but, in 1996, the white male rate had
36 declined to 16.3 per 100,000, while the African-American male suicide rate has increased
37 to 11.5 per 100,000. The suicide rate for fifteen- to nineteen-year-old African-American
38 males increased by 100 percent in this period, and the suicide rate for twenty- to twenty-
39 four-year-old African-American males increased by 300 percent (Shaffer, Gould and
40 Hicks, 1994). The ratio of African-American to white suicides has changed most in the
41 central states where the African-American rate had been lowest (Shaffer, Gould and
42 Hicks, 1994).
43
44
45

1 From 1979 to 1992, the Native American male adolescent and young adult suicide
2 rate in Indian Health Service Areas was the highest in the nation, with a suicide rate of
3 62.0 per 100,000 (Wallace et al., 1996).

4 A number of reasons have been offered to explain the increase of African-
5 American suicide rates. These include increased access to firearms in African-American
6 communities. However, firearm ownership has also increased among women, and this
7 has not led to a similar increase in the female suicide rate (Murphy, 1998). Gould and
8 colleagues found that African-American adolescents who committed suicide had a higher
9 mean SES than the general African-American population (Gould et al., 1996). This led to
10 the hypothesis that lower-class, potentially more-traditional and insular African-
11 American communities might provide an undetermined protective factor. Other
12 empirically unsupported explanations for the previous low rate of African-American
13 suicides included better social support systems among African-Americans and a greater
14 sense of group adherence in a minority, multigenerational, and the support provided by
15 largely nonintegrated, insulated African-American communities (Shaffer, Gould and
16 Hicks, 1994; Gibbs, 1997). Theories contend that, as these supports have weakened, the
17 African-American suicide rate has risen. Yet another explanation has been that ethnic
18 differences in religious beliefs account for the long-standing differences between
19 African-American and white rates, but that increased secularism in African-American
20 youth has led to a reduction in African-American/white differences (Neeleman et al.,
21 1998b). Levels of belief and fundamentalism (rather than the particular religion ascribed
22 to) have been found to be associated with reduced acceptance of suicide (Neeleman et al.,
23 1998a) and increased optimism (Sethi and Seligman, 1993), and high levels of spiritual
24 belief in the African-American community have been correlated with the particularly low
25 suicide rate in particular African-American communities (Neeleman et al., 1998b;
26 Martin, 1984). Martin (1984) and Neeleman et al. (1998b) have found that African-
27 American/white differences in suicidal ideation were no longer present after controlling
28 for spirituality.

29 When spirituality is controlled for statistically, the risk factors for young African-
30 Americans appear similar to those for white youth (i.e., long-term depression, substance
31 abuse, and living alone) (Juon and Ensminger, 1997). However, one should, in general,
32 be cautious about generalizing about cultural influences. For example, while some Native
33 American groups have a suicide rate that is more than twenty-fold higher than the
34 nation's average (May 1987), others have suicide rates equal to or less than the national
35 average. In some instances, this variability could be a function of contagion within
36 isolated groups rather than a result of differences in beliefs, values, or practices.

37
38 **Facilitating Factors**

39 Why suicide should be an option for some young people and not for others
40 remains a mystery. Some of the factors that may contribute to suicide include:

41 *Maladaptive attributional and coping styles.* Perceptions of hopelessness,
42 negative views about one's own competence, poor self esteem, a sense of responsibility
43 for negative events, and the immutability of these distorted attributions may contribute to
44 the "hopelessness" that has been repeatedly found to be associated with suicidality.

45 Biological factors, specifically dysregulation of the serotonergic system, are
46 common in adult suicides (Greenhill et al., 1995; Halperin et al., 1994; Kruesi et al.,

1 1992; Mann and Stoff, 1997; Mann, 1998; Pfeffer et al., 1998; Pine et al., 1995).
 2 Dysregulation is manifest by low levels of serotonin metabolites in central-nervous-
 3 system fluids, low concentrations of presynaptic serotonergic receptors, and dense
 4 concentrations at post-synaptic receptors. These serotonin abnormalities have been
 5 localized to the ventrolateral prefrontal cortex and brainstem of suicide victims and
 6 attempters (in postmortem PET studies as well as *in vivo* biological challenges) (Arango
 7 et al., 1997). This may be related to polymorphisms in the gene for tryptophan
 8 hydroxylase (Amsel and Mann, in press). If this finding is confirmed, it could lead to the
 9 development of simple blood “tests” for suicidality. Serotonin appears to inhibit extreme
 10 fluctuations of mood and reactivity. The vulnerability to suicide of individuals with these
 11 biological abnormalities may be mediated by impulsivity and emotional volatility. As the
 12 ventral prefrontal cortex plays a role in behavioral inhibition, it is conceivable that
 13 serotonin irregularities in this area make it more difficult for a suicidal individual to
 14 control his suicidal impulses (Arango et al., 1997). Studies to demonstrate the precise
 15 behavioral correlates of serotonin dysregulation profiles are still lacking.

16 Adolescents are not exact biologic counterparts of adults. Preliminary small-
 17 sample studies found that three quarters of adolescent suicide attempters had CSF 5-
 18 HIAA concentrations that would indicate severe suicide risk in adults (Kruesi et al.,
 19 1988). In addition, these studies suggest that low CSF HVA might be more predictive in
 20 adolescents (Greenhill, 1995; Kruesi, et al., 1988). Nordstrom and colleagues (1994)
 21 have suggested that knowing the biological status of suicide attempters may have a
 22 practical value and that low CSF 5-HIAA concentrations examined shortly after a suicide
 23 attempt may differentiate between suicide attempters who will commit suicide or repeat
 24 the attempt within a year and those who won't.

25 *Parental psychopathology.* A family history of suicidal behavior (Brent et al.,
 26 1996a; Gould et al., 1996; Shaffer et al., unpublished), parental psychopathology,
 27 parental depression, and parental substance abuse (Brent et al., 1994b; Gould et al., 1996)
 28 are all additional risk factors for teen suicide. Whether these family histories indicate a
 29 genetic vulnerability or environmental stressors, or what combination of the two, is under
 30 study. Family history of suicidal behavior remains a significant risk factor when one
 31 statistically controls for effects of parental psychopathology (Brent et al., 1996a).

32 *Social-psychological factors.* There is an accumulation of evidence that supports
 33 the observation that suicide can be facilitated in vulnerable teens by exposure to real or
 34 fictional accounts of suicide (Velting and Gould, 1997), including media coverage of
 35 suicide, such as intensive reporting of the suicide of a celebrity, or the fictional
 36 representation of a suicide in a popular movie or TV show. The risk is especially high in
 37 the young (Gould et al. 1988; Gould et al., 1990; Gould and Kramer, 1999), and it lasts
 38 for approximately two weeks (Bollen and Philips, 1982).

39 The phenomenon of suicide clusters, defined operationally as three or more
 40 suicides that cluster in a particular locale in a three-month period is presumed to be
 41 related to imitation (Davidson, 1989). Suicide clusters nearly always involve previously
 42 disturbed young people who were aware of another's death, but who did not know the
 43 victim personally (Gould et al., personal communication). Clusters usually involve
 44 adolescents or young adults and account for only 1 to 5 percent of U.S. teen suicides
 45 (Gould and Kramer, 1999).

1 *HIV-positive diagnosis and AIDS.* It has been suggested that HIV infection
2 increases the risk of suicide and suicidal behavior in adolescents and young-adult youth
3 (Cote et al., 1992; Kizer et al., 1988). However, Dannenberg et al. (1996) found no
4 increase in suicide risk during a median follow-up period of seventeen months in HIV-
5 positive applicants for service in the United States Military. Marzuk et al. (1997) found
6 the proportion of New York City suicides who were HIV-positive (adjusted for
7 demographic variables) was higher than the estimated proportion of HIV-positive
8 individuals living in New York City. However, as the information was determined at
9 autopsy, it was unknown whether all suicides were aware of their HIV status and whether
10 they had other risk factors for suicide. More than two thirds of HIV-positive suicide
11 victims had no HIV-related pathology at the time of autopsy, and the investigators
12 concluded that high HIV-positive rate among suicides could be accounted for by other
13 common underlying risk factors, such as substance abuse or alcoholism.

14 One hypothetical model for how these various risk factors fit together is
15 illustrated in Figure 3.

16
17 **[INSERT FIGURE 3 ABOUT HERE]**
18

19 **NON-LETHAL SUICIDAL BEHAVIOR**

20 **EPIDEMIOLOGY**

21
22 Suicide attempts involve any behavior that is intended to end the child or
23 adolescent's life. Nonfatal suicidal acts by ingestion, with non-lethal intent, are
24 sometimes referred to as parasuicide. It is estimated that, each year, approximately two
25 million U.S. adolescents attempt suicide, and almost seven hundred thousand receive
26 medical attention for their attempt (Centers for Disease Control).

27
28 Suicide attempts in adolescence are approximately twice as common in females as
29 males (Centers for Disease Control). In the 1997 U.S. Youth Risk Behavior Survey of
30 approximately 20,000 representational teenagers, suicide attempts were considerably
31 more common in Hispanic females (14.9%) than in either Caucasians (10.3%) or
32 African-Americans (9.0%). Attempts were also more common among Hispanic males
(7.2%) than among whites (3.2%) or African-Americans (5.6%).

33
34 Suicidal ideation is very common among high school students with approximately
35 one in four females and one in six males having seriously considered suicide in a twelve-
36 month period. Hispanic students of both sexes were significantly more likely than whites
37 or African Americans to have seriously considered suicide, made a suicide plan,
38 attempted suicide, or made an attempt requiring medical attention.

39
40 The reasons for the higher rate of suicidal ideation and attempt behavior in
41 Hispanic youth is not known. In their longitudinal examination of the Chicago Woodlawn
42 sample, Juon and Ensminger (1997) found risk factors for suicidal behavior in African-
43 Americans to be very similar to those found in whites (i.e., depression and substance use
44 and a number of family variables).

44 **CLINICAL PRESENTATION OF SUICIDAL BEHAVIOR**

45
46 The spectrum of severity of suicidal behavior ranges from suicidal ideation,
through suicide threats and suicide attempts, to completed.

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Suicidal Ideation

Suicidal ideation includes thoughts about wishing to kill one’s self; making plans of when, where, and how to carry out the suicide; and thoughts about the impact of one’s suicide on others. Not all young children appreciate that suicide may result in irreversible death. There is no definite milestone for understanding the irreversibility of death, which depends to a large extent on what the child has been taught at home and upon the child’s own experiences of death and illness. A child’s appreciation of the finality of death should not necessarily influence the clinician in judging the seriousness of suicidal ideation. For example, a child who believes that someone who dies returns to life a few hours later may be prone to engage in self-harming behavior, not understanding the long-term consequences of the behavior.

Suicide Threats

Suicide threats are utterances made to others that indicate an intent to commit suicide. They may be accompanied by actions to initiate a suicide plan. In young children and adolescents, these are most commonly threats to jump out of a window (usually made when the child is near a window), to run into traffic, or to stab himself or herself.

Methods of Attempt

The large majority of known suicide attempts in the United States are by ingestions, most commonly of over-the-counter analgesics, but the incidence of acts such as hanging, which if not successful may not lead to a medical referral, is not known. Other common attempt methods include superficial cutting of the arms or neck, and, again, the prevalence of this is not known. Less common methods include attempts by the child or teenager to hang himself or herself, to jump from a height, stab himself or herself, drown, or self-immolate. The choice of both attempt and completion method is largely determined by opportunity, but local customs seem to play a role, for there are quite marked—and stable—national differences in preferred methods.

In assessing suicide-attempt behavior, attention is paid to the unusualness of the attempt method, its medical seriousness, how often it has been repeated, and the steps taken to prevent or promote discovery. Repeated attempts, attempts by unusual methods (i.e., other than ingestions or superficial cutting), and medically serious attempts are predictive of further suicide-attempt behavior, and also seem to be predictive of ultimate death by suicide (Beck et al., 1974a) (see Table 1).

Risk Factors

Risk factors for suicide attempts in both genders are mood or anxiety disorders or substance abuse. Panic attacks in girls and disruptive behavior in boys increase risk for suicidal ideation or attempt.

It is very likely that serious family disturbances increase the risk for attempted suicide. This can be inferred from the high incidence of suicide in abused children (Brown et al., 1999; Fergusson et al., 1996; Molnar et al., 1998; Silverman, Reinherz, Giaconia, 1996). Suicidality is also common in runaway teens (Deykin, Albert, McNamara, 1985; Kaplan et al., 1997; Molnar et al., 1998; Shaffer et al., 1996b), who often have a history of previous child abuse. Child abuse is commonly associated with

1 various types of psychopathology and substance abuse, and it is not clear whether the
2 high prevalence of suicidality is a specific consequence of that psychopathology or is
3 more specifically related to a history of abuse. Physical and sexual abuse appear to
4 increase the risk of suicide attempt even when other factors are controlled for (Brent,
5 unpublished; Statham et al., 1998).

6 Regardless of the mechanisms, a clinician examining a child or adolescent where
7 abuse is suspected should assess past and present suicidal ideation or behavior.
8 Conversely, because the attributable risk is quite high (between 15 and 20 percent of
9 female attempters have a past history of abuse), suicide attempters should routinely be
10 asked about previous or current experience of physical and sexual abuse.

11 While there is no evidence that minority sexual orientation is more common in
12 completed teen suicides than in controls, there is strong evidence that gay, lesbian, and
13 bisexual youth of both sexes are significantly more likely to experience suicidal ideation
14 and attempt suicide. Research in five sizeable community samples has demonstrated
15 increased risk (Faulkner and Steiner, 1999; Fergusson et al., 1999; Garofalo et al., 1998;
16 Lock and Steiner, 1999, and personal communication; Remafedi et al., 1998). The
17 increased risk for suicidal ideation and attempt behavior ranges from two-fold (Faulkner
18 and Steiner, 1999) to seven-fold (Remafedi et al., 1998). Gay, lesbian, and bisexual
19 youths were also significantly more likely to make attempts requiring medical attention.
20 Gay, lesbian, and bisexual youths were shown in these studies to carry a number of risk
21 factors for suicidal behavior, including high rates of drug and alcohol use, and were more
22 likely to partake of substances earlier and more frequently. Gay, lesbian, and bisexual
23 youth were also more likely to be bullied and victimized at school. The degree of
24 association between sexual orientation and youth suicidal behavior requires further study
25 to determine effects when other risk factors, such as alcohol or substance use and family
26 difficulties, are controlled for statistically.

27 28 Differences Between Completed and Attempted Suicide

29 Most of our knowledge about the clinical features of suicide attempters and the
30 methods used by suicide attempters is drawn from cases seen in emergency rooms and
31 clinics. The kind of case that presents most commonly is a fifteen- to seventeen-year-old
32 girl who has taken a small- or medium-sized overdose of a readily available medication,
33 most commonly an over-the-counter analgesic or available medication taken by another
34 family member. The behavior is usually impulsive and occurs in the context of a dispute
35 with family or boyfriend or girlfriend.

36 We do not know how typical this profile is, because it is only very recently that
37 information has started to be collected from community-based studies. These studies
38 indicate that the suicide-attempt rate among boys is considerably higher in the
39 community than among patients who present in the emergency room. One of the reasons
40 for this may be that the female-preferred method—a non-lethal ingestion—does not take
41 immediate effect and is treatable. If the patient changes his or her mind or admits to the
42 attempt, they will nearly always seek medical treatment for the medical effects of the
43 overdose. However, it seems likely that many boys attempt to hang themselves and fail,
44 and only rarely do they then seek or need medical treatment. Our knowledge of the
45 differences between referred and non-referred suicide attempters is limited largely to

1 demographic information, and clinical differences still need to be described in greater
2 detail.

3 Studies that have compared completed suicides with suicide attempts have studied
4 clinical cases and, after controlling for gender, they have failed to show significant
5 differences. However, too much should not be made of these negative findings, because
6 serious attempters requiring inpatient care are unlikely to be representative of suicide
7 attempters in general.

8 There have been very few risk-factor comparisons between completed and
9 attempted suicides (Brent et al., 1988; Gould et al., 1998; Shaffer et al., 1996a). Brent
10 found attempters less likely than completers to be bipolar, have a firearm in the home,
11 have high suicidal intent, or to have combinations of mood and non-mood disorders. In
12 contrast, Gould and Shaffer (1998) found that attempters and completers were equally
13 likely to have more than one psychiatric disorder. Failure to find robust differences
14 between the two groups may reflect the requirement in some studies that the attempted-
15 suicide controls be “serious attempts.”

16
17 **NATURAL HISTORY**

18 Little is known about the natural history of suicidal behavior, but early onset of
19 suicidal behavior in prepuberty predicts suicidal behavior in adolescents (Pfeffer et al.,
20 1991, 1993) and early onset of major depressive disorder is associated with suicidal
21 behavior in adolescents (Kovacs et al., 1993) and adults (Harrington et al., 1994; Rao et
22 al., 1993). Attempts to predict at the time of the first attempt which adolescents are likely
23 to repeat their suicidal behavior have not been successful (Goldston et al., 1996; Stein et
24 al., 1998).

25
26 **DEVELOPMENTAL FEATURES**

27 Developmental factors are significant mediators of the clinical presentation of
28 suicidal behavior in children and adolescents and are reflected in the epidemiology of
29 suicidal behavior. Suicidal behavior has been reported among preschool children despite
30 their immature cognitive appreciation of the finality of death (Pfeffer and Trad, 1988;
31 Rosenthal and Rosenthal, 1984). Various suicidal methods are utilized by suicidal
32 children and adolescents but the younger the child, the less complex and the more easily
33 available are the methods used to enact suicidal impulses. Differences between suicidal
34 ideators and suicide attempters are least marked for younger children (Carlson et al.,
35 1994). For example, suicidal ideation and suicide attempts among prepubertal children
36 both predict suicide attempts in adolescence (Pfeffer et al., 1993). Social-adjustment
37 problems of young suicide attempters consist mainly of disturbed intrafamilial
38 relationships in prepubertal children, while peer-related conflicts are the most common
39 among adolescents.

40 The modal ages of onset of the psychiatric symptoms and disorders that increase
41 risk for suicidal behavior in adolescents (such as major depression, substance abuse,
42 bipolar disorder, schizophrenia, and personality disorders), vary across adolescence, with
43 all being more common in older adolescents. This may be the reason for the relative
44 rarity of suicide in childhood and adolescence. Suicide becomes increasingly common
45 with age, reaching a peak between the ages of nineteen and twenty-three years. Adult
46 suicide attempters are eight times more likely than adolescent attempters to commit

1 suicide during the first three and a half years after discharge from a psychiatric hospital
2 (Safer, 1997).

3
4 **ASSESSMENT**

5 Assessment of suicidal patients requires an evaluation of the suicidal behavior
6 and determination of risk for death or repetition as well as of the underlying diagnosis or
7 promoting factors.

8
9 **ASSESSMENT OF THE ATTEMPT**

10 Determine the type of method employed in the suicide attempt (more unusual
11 attempts, i.e., method other than cutting or small ingestion, carry a worse prognosis),
12 potential medical lethality (not always a reliable predictor, some seriously suicidal
13 children and teens are a poor judge of lethality), the degree of planning involved, and the
14 degree to which the chance of intervention or discovery was minimized (signifying
15 higher intent). Previous suicide attempts make a further attempt more likely; a pervasive
16 and frequent degree of current suicidal ideation also denotes greater seriousness and a
17 greater likelihood of an associated mental illness. Availability of firearms or lethal
18 medications should be ascertained, and a recommendation for removal or more secure
19 storage should be made (Brent et al., 1988) as an imperative part of assessment.

20
21 **ASSESSMENT OF THE SUICIDAL IDEATOR**

22 The key question is whether the child or adolescent is contemplating or has
23 attempted suicide without anyone's knowledge. Children and adolescents may be asked
24 the following diagnostic questions (Jacobsen et al., 1994):

- 25
26 • "Did you ever feel so upset that you wished you were not alive or wanted to die?"
27 • "Did you ever do something that you knew was so dangerous that you could get hurt
28 or killed by doing it?"
29 • "Did you ever hurt yourself or try to hurt yourself?"
30 • "Did you ever try to kill yourself?"
31 • "Did you ever think about or try to commit suicide?"

32
33 Evaluating the presence and degree of suicide intent is a complicated matter.
34 Suicide intent involves a balance between the wish to die and the wish to live (Beck et
35 al., 1974a). Some aspects of this address severity of the behavior, the efforts made to
36 conceal the behavior and avoid discovery, and also the formulation of specific plans (e.g.,
37 "Did you do anything to get ready to kill yourself? Did you think what you did would kill
38 you?"). However, children and adolescents systematically overestimate the lethality of
39 different suicidal methods, so that a child or adolescent with a significant degree of
40 suicidal intent may fail to carry out a lethal act.

41 Another approach in assessing suicidal intent is to evaluate motivating feelings,
42 for example, the wish to gain attention, to effect a change in interpersonal relationships,
43 to rejoin a dead relative, to avoid an intolerable situation, or to get revenge. If these
44 motivations have not been satisfied by the time of the evaluation, serious suicidal intent
45 may still be present.

46

1 RISK FACTORS FOR REPEAT SUICIDE ATTEMPT OR SUICIDE

2 Factors that increase the risk of subsequent suicide attempts and/or suicide after a
3 recent attempt are shown in Table 1 (see page X) and include male gender, increasing
4 age, living alone (i.e., runaway, homeless, or isolated), having made previous attempts,
5 attempts with a method other than by ingestion or superficial cutting, and having taken
6 steps to avoid detection. There is also a greater short-term risk of suicide if the current
7 mental state is abnormal.

8
9 ASSESSMENT OF THE UNDERLYING CONDITIONS

10 The conditions that lead to suicidal behavior include psychiatric diagnosis; social
11 or environmental factors, such as isolation, anger, and stress; cognitive distortions that
12 accompany depression—particularly hopelessness, which may also be an indicator of
13 treatment drop-out (Brent et al., 1997)—and inappropriate coping styles (e.g., impulsivity
14 or catastrophizing). A history of family psychopathology, especially of suicidal behavior,
15 bipolar illness, physical or sexual abuse, or substance abuse, may give an indication of
16 risk and of areas that will require intervention, (Fergusson and Lynskey, 1995a, 1995b;
17 Pfeffer et al., 1994). Family discord and other life-event stresses involving interpersonal
18 relationship problems also require assessment.

19 Psychiatric diagnoses that are commonly associated with suicidal behavior
20 include depression, mania or hypomania, mixed states or rapid cycling, or substance
21 abuse. Patients who are irritable, agitated, delusional, threatening, violent, deluded,
22 hallucinating, or voice a persistent wish to die pose a greater short-term risk.

23 A history of rapid mood shifts, from brief periods of depression, anxiety, and
24 rage, to euthymia and/or mania, which may be associated with transient psychotic
25 symptoms, including paranoid ideas and auditory or visual hallucinations, has been held
26 to be strongly associated with a risk for further suicide attempts. Diagnosing such
27 adolescents is complex, and clinicians often utilize various diagnoses, including major
28 depressive disorder with psychotic features, bipolar disorder, schizoaffective disorder,
29 and borderline personality disorder to characterize adolescents with this broad array of
30 symptoms.

31 Recurring suicidal behavior has been associated with hypomanic personality traits
32 (Klein et al., 1996) and cluster-B personality disorders (Brent et al., 1993a, 1994a). The
33 personality disorder that is most often diagnosed is borderline personality disorder
34 (Corbitt et al., 1996). The DSM-IV criteria for this disorder include onset in early
35 adulthood, repeated suicide attempts, non-lethal forms of self-injury, and a pervasive
36 pattern of impulsivity which, after controlling for the lifetime history of depression and
37 substance abuse, appears to be strongly associated with suicidality (Brodsky et al., 1997).
38 Other criteria include unstable mood, unstable interpersonal relationships (that may
39 alternate between idealization and denigration), varying concepts of self (which oscillate
40 between grandiosity and worthlessness), dissociative symptoms, irritability, and behavior
41 that, while pleasurable, can also be self-damaging (e.g., excessive spending, impulsive
42 sexual activity, dangerous driving, etc.). Many of these symptoms are also features of
43 bipolar illness and other mood disorders, and whether or not bipolar personality disorder
44 is a form of bipolar or other mood disorder remains an open question.

45 Gathering information from multiple sources and by varied developmentally-
46 sensitive techniques is essential in evaluating suicidal risk indicators. This may include

1 interviews, play and behavior observation, and use of standard, reliable, valid rating
2 scales. The reliability and validity of interview reporting of children and adolescents may
3 be affected by their level of cognitive development, which may influence their reports of
4 time and cause, and by the type and intensity of emotions and severity of psychological
5 distress at the time of interview, which may influence their memory of suicidal intent and
6 their understanding of the relationship between their emotions and behavior (Carlson et
7 al., 1994; Jacobsen et al., 1994). Confirmation of the child or adolescents' suicidal
8 behavior can be obtained from information gathered by interviewing others who know
9 the child or adolescent. However, there is often a disparity between child and parent
10 reports, with both children and adolescents being more likely to tell of suicidal ideation
11 and suicidal actions than their parents (Brent et al., 1986).

12
13 **SPECIALIZED SUICIDE SCALES AND OTHER INSTRUMENTS**

14 Self-administered suicide scales are useful for screening normal, high risk, and
15 patient populations. They cannot substitute for a clinical assessment, and their tendency
16 is to be oversensitive and underspecific. At this point, suicide scales alone do not have a
17 predictive value. A child or adolescent who is positive on a suicide scale should always
18 be assessed clinically. Most scales have not been tested adequately in a child or
19 adolescent population (see Garrison et al., 1991, and Goldston, in press, for more
20 information on individual scales). Table 3 lists scales measuring suicidality, intent, or
21 potentiality.

22
23 **TREATMENT**

24
25 **PRINCIPLES OF TREATMENT**

26 The successful treatment of suicidal children and adolescents depends on a
27 number of factors with safety considerations being of over-riding importance (Pfeffer,
28 1990, 1997).

29
30 Because of the need to respond to a suicidal crisis, treatment should ideally be
31 provided within a "wrap around" service-delivery system that includes resources for
32 inpatient, short- and long-term outpatient, and emergency intervention (Rotheram-Borus
33 et al., 1996c).

34
35 **ACUTE MANAGEMENT**

36 The child or adolescent who has attempted suicide should be hospitalized if his or
37 her unstable condition makes behavior unpredictable, indicating at least short-term
38 serious risk. Mental-status features predictive of short-term difficulty include the inability
39 to form an alliance with the clinician, a lack of truthfulness or inability to discuss or
40 regulate emotion and behavior, psychotic thinking, current intoxication from drugs or
41 alcohol, or multiple previous serious suicide attempts. Diagnostic features indicating the
42 need for hospitalization include major depressive disorder with psychotic features, rapid
43 cycling with irritability and impulsive behavior, psychosis with command hallucinations,
44 and alcohol or substance abuse. Social factors affecting the decision to hospitalize a child
45 or adolescent include a lack of sufficient environmental support to help stabilize the
46 child's or adolescent's psychiatric state.

1 Other factors that the clinician should ask themselves are whether the patient can
2 form an alliance to report suicidal intent or suicidal plans. Can you, the clinician, identify
3 and decrease potential sources of noncompliance, provide adequate family psycho-
4 education to the family to limit family conflicts and aberrant communication, reduce
5 social-skill and problem-solving deficits, and focus on co-occurring psychopathology?
6 (Berman and Jobes, 1994; Brent, 1997; Brent and Perper, 1995; Piacentini et al., 1995).
7 Being aware of one's limitations in prediction and influence over the family and patient
8 will promote a cautious approach.

9
10 **EMERGENCY OR CRISIS-SERVICE INTERVENTION AND TRIAGE DECISIONS**

11 Children and adolescents with acute suicidal ideation or suicide attempts are
12 frequently first evaluated and treated in an emergency service. It is here that the mental
13 health professional provides the important triage function of referring suitable patients
14 for subsequent treatment. Children and adolescents should never be discharged from the
15 emergency service without the child's or adolescent's caretaker (see Table 4) to verify
16 the child or teen's account. They also need to be seen to discuss making firearms and/or
17 lethal medications inaccessible to the child (Kruesi et al., 1999). There is empirical
18 evidence that, unless this discussion is held, parents will not, on their own initiative, take
19 the necessary precautions (McManus et al., 1997). Parents have been found more willing
20 to secure firearms than to remove them. Limiting the adolescent's access to alcohol or
21 other potentially disinhibiting substances should also be discussed with patient and
22 family. Before discharge, the clinician must have a good understanding of the amount of
23 support that will be available for the child or adolescent if they are discharged home. The
24 clinician should recognize that treatment recommendations are more likely to be followed
25 if they match the expectations of the family, are economically feasible, and if the parent
26 is well and available enough to support attendance. The family's experience in the
27 emergency room may also color the referral process (Rotheram-Borus et al., 1996a,
28 1996b).

29
30 **[INSERT TABLE 4 AROUND HERE]**

31
32 Rotheram-Borus et al. (1996b) described a brief emergency room crisis
33 intervention procedure for adolescent attempters that resulted in improved compliance for
34 at least the first outpatient follow-up visit. The aim of the intervention was to provide a
35 good experience between the family and emergency service staff, set realistic
36 expectations about follow-up treatment, and obtain a commitment from the adolescent
37 suicide attempters and their relatives to return for further evaluation. It included a series
38 of emergency room staff training sessions to reduce staff perceptions that the family were
39 to blame for the teenager's behavior, and to encourage staff to explain emergency service
40 procedures to the patient. A videotape was shown to the attempter and family to increase
41 their understanding of adolescent suicidal behavior and its treatment. Finally, there was a
42 family treatment session provided by a crisis therapist who negotiated a contract with the
43 suicidal adolescent and family and who served some case management functions between
44 the family and the follow-up treatment provider. The research was not able to identify
45 which of these components led to an increase in initial compliance.

1 There should always be a detailed discussion with the patient and family about
2 the specific issues or situations that might promote further suicidal behavior if stress is
3 unavoidable and the type of coping behavior that can be used to obviate a further attempt.
4 Helping the family to identify potential precipitants, beginning to problem-solve on how
5 to prevent reoccurrence, is really the beginning of treatment. If the patient and family
6 cannot effectively do this, it becomes a matter of concern. A written or verbal “no-
7 suicide” contract is commonly negotiated at the start of treatment in the hope that it will
8 improve treatment compliance and reduce the likelihood of further suicidal behavior
9 (Brent, 1997; Rotheram, 1987). The no-suicide contract can be used as a “probe” to
10 understand the patient’s and family’s ability to institute change. However, the clinician
11 should know that there have been no empirical studies that have evaluated the efficacy of
12 a contract (Reid, 1998). The usual form of a contract is that the child or adolescent should
13 promise not to engage in suicidal behavior and should inform the parents, therapist, or
14 other responsible adult if they have thoughts of suicide or develop plans to commit
15 suicide (Simon, 1991). It is hoped that a contract will increase the patient’s and family’s
16 commitment to treatment, but it should never substitute for other types of intervention. If
17 there is a disturbance of mental state, the clinician should never rely upon a no-suicide
18 contract (Egan et al., 1997; Fergusson and Lynskey, 1995b).

19 Limitations must be considered when using a “no-suicide” contract (Miller et al.,
20 1998). It should only be used if a comprehensive assessment of the suicidal patient’s
21 mental state and a consideration of the developmental state indicate that the patient
22 understands the commitment. It should not be seen as more than an adjunct to the
23 management of patients with low intent. Even if the patient agrees to such a contract,
24 suicide risk may persist. It should also be appreciated that a “no-suicide” contract may
25 lessen a patient’s communication of stress and dysphoria, decrease the potential for
26 developing a therapeutic alliance, and impair risk management. Coercive
27 communications, such as “unless you promise not to attempt suicide, I will keep you in
28 the hospital or tell your parents about your behavior,” should be avoided, because this
29 may encourage deceit and defiance.

30 Treatment compliance may be improved by offering definite, closely spaced
31 follow-up appointments, being flexible in arranging appointments if a crisis should arise
32 and reminding the family and patient by telephone or note about the next appointment. If
33 an appointment is missed, the patient and parent should be contacted. Hopeless and
34 depressed children and adolescents, who may be not be able to commit to a lengthy
35 treatment process, may be better engaged by offering short-term treatment plans with
36 defined intervention goals. While offering confidentiality for some issues, it is essential
37 that the clinician communicate to the patient that, if they feel that suicidal thinking or
38 behavior is imminent, such information will be shared with the parents.

39 40 INPATIENT CARE AND PARTIAL HOSPITALIZATION

41 There is no evidence that exposure to other suicidal psychiatric inpatients will
42 increase the risk of suicidal behavior (King et al., 1995). Determining when a patient is
43 ready for discharge from the hospital or crisis center will usually include an evaluation of
44 the severity of existing suicidal ideation and intent. Implicit coercions, e.g., telling the
45 patient that they will not be discharged until he/she can state that he/she is not suicidal,

1 should be avoided. Attention to clearly dysfunctional family patterns or parental
2 psychiatric illness may improve the child or teen's later outcare (King et al., 1997).

3 Partial hospitalization offers intensive multidisciplinary treatments and skilled
4 observation and support. It can be a good alternative to acute psychiatric hospitalization
5 if the child or adolescent is considered to be disturbed but containable in a supportive
6 home or other residential setting. Partial hospitalization may provide more time than
7 acute hospitalization to stabilize the emotional condition and address environmental
8 stresses and problems. It may be utilized as a step-down from acute psychiatric
9 hospitalization.

10 11 Outpatient Treatment

12 Outpatient treatment should be used when the child or adolescent is not likely to
13 act on suicidal impulses, when there is sufficient support at home, and when there is
14 someone who can take action if the adolescent's behavior or mood deteriorates.

15 16 SPECIFIC PSYCHOTHERAPIES

17 Suicidal children and adolescents report feeling intense, painful, and distressing
18 depression and worthlessness; anger; anxiety; and a hopeless inability to change or find a
19 solution to frustrating circumstances (Kienhorst et al., 1995; Ohring et al., 1996). They
20 may respond impulsively to their sense of desperation by attempting to commit suicide.
21 Psychotherapeutic techniques aim to decrease such intolerable feelings and thoughts and
22 to re-orient the cognitive and emotional perspectives of the suicidal child or adolescent
23 (Kernberg, 1994; Spirito, 1997). Working with suicidal children and adolescents is best
24 done by a clinician who is available to the suicidal patient and family, has skill and
25 training in managing suicidal crises, relates to the patient in an honest and consistent
26 way, can objectively understand the suicidal patient's attitudes and life problems, and
27 conveys a sense of optimism and activity (Katz, 1995; Pfeffer 1990). Given these
28 personal attributes, the therapist may use various models of psychotherapy, although
29 there have been relatively few empirical studies that have evaluated their efficacy.

30 31 Cognitive-Behavioral Therapy

32 Suicidal children and adolescents often experience negative cognitions about
33 themselves, their environment, and their futures. Cognitive-behavioral therapy (CBT) has
34 been shown to be an effective intervention for depressive symptoms (Clarke et al., 1999;
35 Elkin et al., 1989; Shea et al., 1992; Weissman, 1979). Experience with teens is much
36 more limited. In a single set of studies, short-term CBT appears to be more effective than
37 family or supportive therapy (Brent et al., 1997) in depressed teens. But after two years,
38 differences between the groups are no longer apparent (Birmaher et al., 2000). The
39 efficacy of CBT in suicidal adolescents has not yet been examined, but in the above
40 studies all therapies reduced suicidal ideation.

41 Brent and colleagues created a CBT treatment manual (Brent and Poling, 1989,
42 revised 1997), modifying the approach of Beck and colleagues (1979) for depressed
43 adolescents. The treatment comprised twelve to sixteen weekly sessions followed by a
44 six-month booster phase of monthly or bi-monthly sessions. Parents and adolescents
45 received a psychoeducational manual about mood disorders and their treatments and were
46 offered a session just to discuss these issues. The active intervention was described as a

1 collaborative “guided discovery” to monitor and modify automatic thoughts,
2 assumptions, and beliefs (Brent, 1997). Concrete examples were used to illustrate the
3 cognitive-behavioral treatment model that involves exploring concerns about autonomy
4 and trust; cognitive distortions; and negative self-concepts, attributions, and cognitions.

5 Since suicidal individuals are thought to often have difficulty in communicating
6 and negotiating their needs and wishes (McLeavey et al., 1994) and to frequently resort
7 to passive avoidant coping strategies (Adams and Adams, 1991). Brent’s treatment model
8 encouraged more assertive and direct methods of communicating, as well as increasing
9 the teen’s ability to conceptualize alternative solutions to problems. Meetings with
10 parents were sometimes held to augment the treatment. Brent (1997) advocates
11 adjunctive use of psychopharmacology if depressed adolescents have not improved after
12 four to six weeks of cognitive-behavioral treatment.

13 Brent’s study provides no evidence of the efficacy of cognitive-behavioral
14 therapy for teens who had made a suicide attempt, who were not included in this study.
15 However, the intervention was reported to be as effective as systemic family therapy and
16 nondirective supportive therapy in reducing suicidal ideation in depressed adolescents
17 (Brent et al., 1997) during the twelve- to sixteen-week treatment period.

18 19 Interpersonal Psychotherapy

20 Suicidal behavior in children and adolescents is frequently associated with
21 interpersonal conflict and treatment of this may reduce suicidal risk.

22 Interpersonal psychotherapy (IPT) is a time-limited psychotherapy that addresses
23 interpersonal problems, which are categorized into issues of loss, interpersonal role
24 disputes, role transitions, and interpersonal deficits. It was originally developed for major
25 depression (Klerman et al., 1984) and was designed to be administered over twelve to
26 sixteen weeks. Mufson and Moreau have modified it for use with depressed adolescents
27 (Mufson et al., 1999) and found it more effective than a control therapy. The treatment
28 may be appropriate for suicidal depressed adolescents with interpersonal problems.

29 IPT focuses on current interpersonal relationships; and on the immediate social
30 context. Unlike cognitive-behavior therapy which addresses the distortions of thinking
31 that may provoke maladaptive behavior, interpersonal psychotherapy (IPT) focuses on
32 the style and effectiveness of interpersonal interactions. The adolescent’s treatment is
33 administered weekly over twelve weeks. Frequent telephone contacts are maintained with
34 adolescent patients and parents are often involved.

35 The initial phase involves an evaluation of symptoms, diagnosis, and history of
36 interpersonal relationships. Special attention is paid to changes in relationships
37 immediately prior to the onset of depressive symptoms. The therapist educates the patient
38 about the symptoms of depression and places the symptoms within a framework of
39 interpersonal distress, such as reactions to loss, interpersonal role disputes (conflicts with
40 a significant other person) , role transitions (change in life status, such as change of grade
41 or school, moving, change in a relationship), and interpersonal deficits (lack of social
42 skills that lead to problems starting and sustaining interpersonal relationships). Some of
43 the interpersonal issues for adolescents that are addressed by IPT-A include separation
44 from parents, conflicts with parental authority, development of close relationships with
45 members of the opposite sex, initial experience with death of a relative or friend, and

1 peer pressures. Specific issues of adolescents living in single parent households are
2 addressed (Mufson et al., 1993), and the family may be included in the treatment.

3 The middle phase addresses the patient's own interpersonal problems. The
4 therapist supports efforts to decrease patient's pessimism and efforts to achieve new
5 solutions to interpersonal dilemmas. The treatment emphasizes options for change that
6 had been precluded by symptoms of depression.

7 The termination phase supports the patient's newly achieved and recognized
8 independence in managing interpersonal concerns. It aims to assist the patient in
9 recognizing and diminishing effects of future depressive symptoms.

10 Mufson and colleagues (1993) caution that interpersonal psychotherapy for
11 adolescents was developed for nonpsychotic, nonsuicidal depressed adolescents.
12 However, it is a useful treatment for addressing the adolescent's use of suicidal behavior
13 as a method of communicating anger, distress, or resolving conflict and its ability to help
14 adolescents with suicidal ideation will depend on the teen's ability to establish a
15 therapeutic alliance and commit to informing the therapist about suicidal preoccupations
16 and intent and going to an emergency service if necessary.

17 18 Dialectical-Behavioral Therapy

19 Dialectical-behavior therapy (DBT) is the only form of psychotherapy that has
20 been shown in a randomized control trial to reduce suicidality in adults with borderline
21 personality disorder (Linehan, 1993a, 1993b). This treatment is based on a biosocial
22 theory in which suicidal behaviors are considered to be maladaptive solutions to painful
23 negative emotions (Linehan, 1993a) but that, also, have affect-regulating qualities and
24 elicit help from others (Linehan, 1993a).

25 The treatment involves developing problem-oriented strategies to increase distress
26 tolerance, emotion regulation, interpersonal effectiveness, and the use of both rational
27 and emotional input to make more balanced decisions (Linehan, 1993b). It usually
28 involves individual and group sessions over the course of a year.

29 Recently, a modified and manualized form of this treatment has been used with
30 suicidal adolescents with a diagnosis of borderline personality (Miller et al., 1997). The
31 modifications DBT-A included were the participation of a relative in the skills training
32 group who was charged to improve the home environment and to teach relatives to model
33 and reinforce adaptive behaviors for the adolescents. DBT-A has been reduced from one
34 year to two twelve-week stages, covers fewer skills, and uses simpler language for skills
35 training. In a non-randomized comparative-treatment study with adolescents who were
36 suicidal and diagnosed as borderline, there was a suggestion that dialectical behavioral
37 therapy for adolescents (DBT-A) is acceptable to teens and reduces rates of psychiatric
38 hospitalization (Miller et al., 1997).

39 The treatment comprises four components or modules: 1) A Core Mindfulness
40 Skills module to diminish identity confusion and self-dysregulation. This includes
41 teachings of Zen meditation to enhance emotional control; 2) An Interpersonal
42 Effectiveness Skills module to enable interpersonal problem-solving through
43 assertiveness training and to make the adolescent more aware of their goals in an
44 interpersonal situation; 3) A Distress Tolerance module to reduce impulsivity by teaching
45 acceptance and tolerance of painful situations with self-soothing, distraction from pain,
46 and by generating ideas about the positive and negative aspects of painful situations; 4)

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1 An Emotion Regulation Skills module to identify emotions, reduce emotional
2 vulnerability, and increase positive events.

3 Individual therapy is given weekly and focuses on reviewing a weekly diary
4 documenting suicidal and self-destructive behavior; behaviors that interfere with
5 treatment and quality of life; and use of new skills. The therapist conducts a behavioral
6 analysis of each behavior problem with the goal of understanding its function and the
7 situations that provoked it, identifying constructive solutions, and avoiding problems.
8 During the first twelve weeks of treatment, phone consultations with the therapist include
9 discussions about skills that may be useful to decrease suicidal behaviors, report positive
10 behaviors and events, and resolve conflicts with the therapist.

11 In the second twelve weeks of treatment, patient consultation groups focus on
12 adolescents helping each other to utilize skills to cope with life circumstances.

13 14 Psychodynamic Psychotherapy

15 Conflict resolution is a basic issue in psychodynamic psychotherapy. It aims to
16 resolve internal conflicts related to early experiences with rejection, severe discipline,
17 and abuse. It also aims to improve self-esteem by enabling the suicidal child or
18 adolescent to become more self-reliant and less inhibited by their belief that they are
19 responsible for creating their problematic circumstances. There are no studies that
20 address the efficacy of this approach, which is probably the most commonly administered
21 form of therapy and seems to encourage long-term involvement by the child or
22 adolescent patient.

23 24 Family Therapy

25 As indicated above, family discord, poor communication, disagreements, lack of
26 cohesive values and goals, and irregular routines and activities (Miller et al., 1992) are
27 common in suicidal children and adolescents who often feel isolated within the family.
28 Some have suggested that they view themselves as expendable to the family and that this
29 is a motivating force for self-annihilation (de Jong, 1992; Miller et al., 1992; Pfeffer,
30 1986; Sabbath, 1969). Family intervention may decrease such problems, enhance
31 effective family problem-solving and conflict resolution, and reduce blame directed
32 toward the suicidal child or adolescent. Family-based cognitive therapy aims to reframe
33 the family's understanding of their problems; to alter the family's maladaptive problem
34 solving techniques, and to encourage positive family interactions (Rotheram-Borus et al.,
35 1994). Harrington has found that a time-limited home-based intervention for suicidal
36 children and adolescents had limited efficacy for children and adolescents without major
37 depressive disorder (Harrington et al., 1998). Psycho-educational approaches can help
38 parents clarify their understanding of childhood and adolescent suicidal behavior,
39 identify changes in mental state that may herald a repetition and reduce the extent of
40 expressed emotion or anger (Brent et al., 1993i; Fristad et al., 1996). The clinician can
41 harness the power of the family to help restrict access to lethal medication and firearms,
42 and to convey the importance of treatment.

43 44 PSYCHOPHARMACOLOGICAL INTERVENTIONS

45 In meta-analyses of adult studies, Tondo and colleagues (1997) found that lithium
46 maintenance treatment greatly reduces (8.6 fold) the recurrence of suicide attempts in

1 adults with bipolar or other major affective disorders. Further, when lithium is
2 discontinued there is a seven-fold increase in the rate of suicide attempts and a nine-fold
3 increase in the rates of suicide. Tondo noted that the effects of lithium on reducing
4 suicidal risk may be unique and may be due to its central serotonin enhancing qualities.
5 However, lithium prescriptions for children and adolescents require careful third-person
6 supervision, as overdoses may be lethal.

7 Other mood stabilizers, such as valproate and carbamazepine, are also widely
8 used to treat bipolar disorders in children and adolescents; although their efficacy has yet
9 to be empirically demonstrated. However, as with adults, depressed suicidal children and
10 adolescents with history of bipolar disorder should first be treated with a mood stabilizer
11 before receiving an antidepressant.

12 If lithium efficacy is eventually shown in adolescents, research will also be
13 needed to determine the length of time necessary to treat suicidal children and
14 adolescents. Psychopharmacological treatment can also be given for the associated
15 disorders that are frequently present, although there is no evidence that this reduces the
16 risk of later suicide or reattempts. Further, one must be careful about the risk of inducing
17 suicidal ideation or behavior through psychopharmacological activation or disinhibition.

18 Studies in depressed adults have found that SSRIs reduce suicidal ideation (e.g.,
19 Letizia et al., 1996) and separately reduce the frequency of suicide attempts in non-
20 depressed patients with cluster-B personality disorders with a past history of suicide-
21 attempt behavior. In a controlled trial of the depot neuroleptic flupenthixol, Montgomery
22 (1982) noted a significant reduction in suicide-attempt behavior in adults who had made
23 numerous previous attempts. Similar studies have yet to be conducted on adolescents,
24 although trials of SSRIs in depressed adolescents indicate that these drugs are safe and
25 effective in treating adolescent depression (Emslie et al., 1997; Ryan and Varma, 1998).
26 Because SSRIs, such as fluoxetine, appear to be more effective in treating adolescent
27 depression (Emslie et al., 1997) than tricyclic antidepressants (Ryan and Varma, 1998) in
28 placebo-controlled methodologically appropriate studies, it is reasonable to regard SSRIs
29 as a first-choice medication for suicidal children and adolescents (also see the American
30 Academy for Child and Adolescent Psychiatry's Practice Parameters for the Assessment
31 and Treatment of Children and Adolescents with Depressive Disorders, 1998). In contrast
32 to the highly lethal potential of tricyclic antidepressants when taken in overdoses, SSRIs
33 have low lethal potential.

34 However, in the past decade, there has been much controversy over whether the
35 SSRI antidepressants can induce suicidal ideation and/or behavior in a small minority of
36 cases. A number of case reports appeared in 1990 describing patients who had developed
37 suicidal preoccupations after starting treatment with fluoxetine (e.g. King, 1991
38 [children]; Masand, 1991; Teicher, 1990 [adults]). These reports were not supported by
39 meta-analyses and re-analyses of large SSRI-treatment trials of depressed, bulimic, or
40 anxious patients (Beasley, 1991; Letizia et al., 1996; Montgomery et al., 1995). The
41 conclusion was reached that suicidal ideation is a common feature of depression and that
42 the prevalence in SSRI-treated depressives was no greater than expected.

43 However, one reanalysis (Mann and Kapur, 1991) of data presented in certain of
44 these studies suggested that new ideation was significantly more common in SSRI-
45 treated depressed patients who had not previously reported suicidal ideation. Further, in a
46 naturalistic challenge study, Rothschild and Locke (1991) were able to re-induce suicidal

1 ideas in a small series of patients who had first experienced ideation after starting
2 treatment with fluoxetine. These patients had also experienced akathisia as a
3 complication of fluoxetine treatment, and a relationship between suicidality and
4 fluoxetine-induced akathisia has been noted by others (Hamilton and Opler, 1992).

5 At this stage, the wisest course of action for the practitioner is to be particularly
6 observant during the early stages of fluoxetine treatment of a depressed adolescent, to
7 systematically inquire about suicidal ideation before and after treatment is started, and to
8 be especially alert to the possibility of suicidality if SSRI treatment is associated with the
9 onset of akathisia.

10 Clinicians should be cautious about prescribing medications that may reduce self-
11 control, such as the benzodiazapines, and phenobarbital. Phenobarbital also has a high
12 lethal potential if taken in overdose (Carlsten et al., 1996). Montgomery (1997) noted that
13 benzodiazapines may disinhibit some individuals who then exhibit aggression and suicide
14 attempts and there are suggestions of similar effects from the antidepressants, maprotiline
15 and amitriptyline, the amphetamines, and phenobarbital (Carlsten et al., 1996).
16 Amphetamines or other stimulant medication should only be prescribed when treating
17 suicidal children and adolescents with ADHD. Stimulants are the first line of treatment
18 for children with ADHD. Tricyclics should not be prescribed, because of their greater
19 lethal potential.

20 In summary, Lithium or a mood stabilizer can be labeled as the first line of
21 pharmacological treatment for children and adolescents with bipolar disorder and should
22 be prescribed before an antidepressant. Selective serotonin reuptake inhibitors are the
23 preferred psychopharmacological treatment for childhood and adolescent depression,
24 with caution that suicidal youth on SSRIs must be watched for any increase in agitation
25 or suicidality. Stimulant medications should only be prescribed for children and
26 adolescents with ADHD. While medications may be essential in stabilizing and treating
27 the suicidal child and adolescent, all administration must be carefully monitored by a
28 third party who can report any unexpected change of mood, increase in agitation or
29 emergency state, or unwanted side-effects, and regulate dosage.

30
31 **PREVENTION**

32
33 **COMMUNITY-BASED SUICIDE PREVENTION**

34 The principal public health approaches to suicide prevention have been: 1) crisis
35 hot lines; 2) method control; 3) indirect case-finding by educating potential gatekeepers,
36 teachers, parents, clergy, and peers to identify the “warning signs” of an impending
37 suicide; 4) direct case-finding among high-school or college students or among the
38 patients of primary practitioners by screening for conditions that place teens at risk for
39 suicide; 5) media counseling to minimize imitative suicide; and 6) training professionals
40 to improve recognition and treatment of mood disorders.

41
42 **CRISIS HOT LINES**

43 Although crisis hot lines are available almost everywhere in the United States,
44 research so far has been fairly limited and has failed to show that crisis hotlines impact
45 on the incidence of suicide. Possible reasons for this include:
46

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- 1 1. That actively suicidal individuals (males and individuals with an acute mental
2 disturbance) do not call hot lines, because they are acutely disturbed, preoccupied, or
3 intent on not being deflected from their intended course of action.
4
- 5 2. That they fail to reach the hot line. Hot lines are often busy, and there may be a long
6 wait before a call is answered, so that callers disconnect.
7
- 8 3. The advice individuals get on calling a hot line may be stereotyped, inappropriate for
9 an individual's needs, and perceived as unhelpful by the caller.
10
- 11 4. Gender preferences in seeking help result in the large majority of callers being
12 females, whereas males are at the greatest risk for suicide.
13

14 While each of these deficiencies is potentially modifiable, to date there have been
15 no systematic attempts to do so. Research studies in this area have been sparse and are
16 sorely needed.
17

18 METHOD RESTRICTION

19 Method preference varies by gender and by nationality. In the United States, the
20 most common method for committing suicide is by firearm, and it has been suggested
21 that reducing firearm availability will reduce the incidence of suicide (Moscicki, 1995).
22 However, a natural experiment in Great Britain makes this unlikely. The favored suicide
23 method, self-asphyxiation with coal gas, became impossible after the introduction of
24 natural gas. This resulted in a marked, but not permanent, decline in the suicide rate.
25 Within a decade, the suicide rate had returned to previous levels, and suicides were being
26 committed by alternate means. There is, as yet, no good evidence that reducing access to
27 firearms by gun-security laws has a significant impact on suicides attributable to
28 firearms, although they do impact on accidental deaths from firearms (Cummings et al.,
29 1997a). Raising the minimum legal drinking age for young adults does appear to reduce
30 the suicide rate in the affected age group (Birckmayer and Hemenway, 1999)
31

32 INDIRECT CASE-FINDING THROUGH EDUCATION

33 Controlled studies (Shaffer et al., 1991; Veiland et al., 1991; Spirito et al., 1988a)
34 have failed to show that classes for high-school students about suicide increase students'
35 help-seeking behavior when they are troubled or depressed. On the other hand, there is
36 evidence that previously suicidal adolescents are perturbed by exposure to such classes
37 (Shaffer et al., 1990). Such educational programs seem, therefore, to be both an
38 ineffective mode of case-finding and to carry with them an unjustified risk of activating
39 suicidal thoughts.
40

41 DIRECT CASE-FINDING

42 Direct case-finding is an excellent and cost-effective way to identify possibly at-
43 risk children and adolescents in a school setting (Reynolds, 1991; Shaffer et al., 1996) . It
44 may also be used in detention centers or foster-care facilities. The direct screening may
45 target all children and has been employed in various high schools across the country
46 (Reynolds et al., 1991; Shaffer et al., 1996) and is highly sensitive.

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1 There is evidence that adolescents will—if asked in a non-threatening way—
2 provide accurate information about their own suicidal thoughts and/or behaviors. A
3 sensible approach to suicide prevention, therefore, is to systematically screen fifteen- to
4 nineteen-year-olds (the age group at greatest risk for such attempts) for: 1) previous
5 suicide attempts; 2) recent, serious, suicidal preoccupations; 3) depression; or 4)
6 complications of substance or alcohol use. Clearly, screening programs need to go
7 beyond identifying a teen with a high-risk profile. Youth identified in this way should be
8 referred for evaluation and, if necessary, treatment. Contingency arrangements may need
9 to be made to assist uninsured adolescents with help if it is needed.

10 11 MEDIA COUNSELING

12 The Centers for Disease Control (from a 1994 workshop) and the American
13 Foundation for Suicide Prevention (Gould and Kramer, 1999) have issued sensible
14 guidelines for reporters and editors, pointing to the risks of exaggerated or prominent
15 coverage of youth suicide in general, and of the risks in focusing attention on an
16 individual suicide. These sensible guidelines, excerpted in Appendix III, should be
17 known to child clinicians who are engaged in public health practice, even though there is
18 as yet no good evidence that their application is effective in reducing the suicide rate.

19 20 TRAINING

21 After a two-day course of training on how to evaluate mood disorders and
22 suicidality, preliminary and as-yet-unreplicated studies in Sweden (Rihmer et al., 1995)
23 suggest that educating primary practitioners to better identify and treat mood disorders
24 results in a reduction in the number of suicides and suicide attempts (among females) and
25 an increase of antidepressant prescriptions and hospitalizations. Because the optimal
26 treatment of adolescent depression is not as well understood as that of adult depression,
27 this is an option that may prove to be useful but that, at the moment, is still preliminary.
28 Educating all clinicians who encounter adolescents, not just mental health clinicians, in
29 how to recognize and, if necessary, refer the suicidal child or adolescent is a worthwhile
30 end in itself, regardless of its impact on suicide.

31 32 POSTVENTION

33 When a parent or sibling commits suicide, the bereaved prepubertal child is at risk
34 for symptoms of anxiety and depression. A sizable proportion of these children do in fact
35 develop anxiety disorders involving PTSD and mood disorders involving major
36 depression (Pfeffer, 1997). Having a friend or acquaintance commit suicide increases
37 likelihood of major depression, anxiety disorder, suicidal ideation, and PTSD onset in
38 adolescents in the six months immediately following a suicide (Brent et al. 1996b; Pfeffer
39 1997). Prior psychiatric disorder and a family history of psychiatric disorder, particularly
40 affective illness or previous exposure to suicidal behavior, increase vulnerability for
41 adolescents exposed to a peer's suicide (Brent et al., 1996c). Parental psychiatric
42 symptoms such as depression, PTSD, or other anxiety states are directly related to the
43 severity of bereaved children's propensity for symptoms of anxiety and/or depression
44 (Pfeffer, 1997). Actually witnessing the suicide or viewing the scene afterwards increases
45 the risk of adolescent PTSD and anxiety disorder (Brent et al., 1996b, 1996c). While
46 intervention is exceedingly important in this immediate period, long-term support and

1 services are also necessary. Three years after an adolescent suicide, adolescent friends
2 who spoke to the victim the day before the suicide and felt they had knowledge of the
3 impending suicide and failed to prevent it are most likely to still suffer from major
4 depression and PTSD (Brent et al., 1996c). Clinicians need to work carefully with these
5 adolescents harboring guilt, and recognize that the effects of an adolescent suicide are
6 far-reaching. Bereavement should be distinguished from depression and psychiatric
7 disorder. As an adolescent suicide attempt also may increase risk of suicidal behavior and
8 psychiatric disorder in friends and acquaintances (Hazell and Lewin, 1993), clinicians
9 need to work with these adolescents as well.

10 The goal of the clinician is to decrease the likelihood of identifying with the
11 suicidal behavior of the deceased as a coping strategy in dealing with adversity (Brent,
12 1997). Psycho-educational counseling may reduce the risk for suicidal behavior in these
13 circumstances. Intervention is also needed to promote grief and mourning and to decrease
14 the child's or teen's personal sense of guilt, trauma, and social isolation (Pfeffer, 1997).
15 This treatment can be given in individual meetings, at group sessions with other teens, or
16 in conjunction with parents who need help to support the adaptive capacities of their
17 children and adolescents. School professionals sometimes offer programs of this kind,
18 and can be invaluable in identifying grieving friends who may need help.

19
20 **CONFLICT OF INTEREST**

21 As a matter of policy, some of the authors to this practice parameter are in active
22 clinical practice and may have received income related to treatments discussed in these
23 parameters. Some authors may be involved primarily in research or other academic
24 endeavors and also may have received income related to treatments discussed in this
25 parameter. To minimize the potential for this parameter to contain biased
26 recommendations due to conflict of interest, the parameter was reviewed extensively by
27 Work Group members, consultants, and Academy members; authors and reviewers were
28 asked to base their recommendations on an objective evaluation of the available
29 evidence. Authors and reviewers who believed that they might have a conflict of interest
30 that would bias, or appear to bias, their work on this parameter were asked to notify the
31 Academy.

32
33 **SCIENTIFIC DATA AND CLINICAL CONSENSUS**

34 Practice parameters are strategies for patient management, developed to assist
35 clinicians in psychiatric decision-making. This parameter, based on evaluation of the
36 scientific literature and relevant clinical consensus, describe generally accepted
37 approaches to assess and treat specific disorders or to perform specific medical
38 procedures. The validity of scientific findings was judged by design, sample selection
39 and size, inclusion of comparison groups, generalizability, and agreement with other
40 studies. Clinical consensus was determined through extensive review by the members of
41 the Work Group on Quality Issues, child and adolescent psychiatry consultants with
42 expertise in the content area, the entire Academy membership, and the Academy
43 Assembly and Council.

44 This parameter is not intended to define the standard of care; nor should they be
45 deemed inclusive of all proper methods of care or exclusive of other methods of care
46 directed at obtaining the desired results. The ultimate judgment regarding the care of a

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1 particular patient must be made by the clinician in light of all the circumstances presented
2 by the patient and his or her family, the diagnostic and treatment options available, and
3 available resources. Given inevitable changes in scientific information and technology,
4 these parameters will be reviewed periodically and updated when appropriate.
5

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

1 REFERENCES

2 *References marked with an asterisk are particularly recommended.*

3 Adams M, Adams J (1991), Life events, depression, and perceived problem-solving
4 alternatives in adolescents. *J Child Psychol Psychiatry* 811–820

5
6 Alcohol, Drug Abuse, and Mental Health Administration (1989), *Report of the*
7 *Secretary's Task Force on Youth Suicide. Volume 1: Overview and*
8 *Recommendations* (DHHS Publication ADM 89–1621). Washington, DC: US
9 Government Printing Office

10
11 American Foundation for Suicide Prevention (1999), *Today's suicide attempter could be*
12 *tomorrow's suicide* (poster). New York: Author, 1-888-333-AFSP

13
14 Amsel L, Mann JJ (in press), Biological aspects of suicidal behavior. In: *Oxford Textbook*
15 *of Psychiatry*, Gelder MG, Lopez-Ibor JJ, Andreasen NC, eds. Oxford: Oxford
16 University Press

17
18 Arango V, Underwood MD, Mann JJ (1997), Biologic alterations in the brainstem of
19 suicides. *Psychiatr Clin North Am* 581–93

20
21 Beasley CM Jr, Dornseif BE, Bosomworth JC, Sayler ME, Rampey AH Jr, Heiligenstein
22 JH, Thompson VL, Murphy DJ, Masica DN (1991), Fluoxetine and suicide: a
23 meta-analysis of controlled trials of treatment for depression. *BMJ* 685–92

24
25 Beck AT, Rush AJ, Shaw BF, Emery G (1979), *Cognitive Therapy of Depression*. New
26 York: Guilford Press

27
28 Beck AT, Kovacs M, Weissman A (1979), Assessment of suicide intention: the Scale for
29 Suicide Ideation. *J Consult Clin Psychol* 343–352

30
31 Beck AT, Schuyler D, Herman I (1974a), Development of suicidal intent scales. In: *The*
32 *Prediction of Suicide*, Beck AT, Resnik HLP, Lettieri DJ, eds. Bowie, MD:
33 Charles Press, pp 45–56

34
35 Beck AT, Weissman A, Lester D, Trexler L (1974b), The measurement of pessimism: the
36 Hopelessness Scale. *J Consult Clin Psychol* 861–865

37
38 Birckmayer J, Hemenway D (1999), Minimum-age drinking laws and youth suicide,
39 1970–1990. *Am J Public Health* 1365–8

40
41 * Birmaher B, Brent DA, Kolko D, Baugher M, Bridge J, Holder D, Iyengar S, Ulloa RE
42 (2000), Clinical outcome after short-term psychotherapy for adolescents with
43 major depressive disorder. *Arch Gen Psychiatry* 29–36

44
45 Bollen KA, Philips DP (1982), Imitative studies: a national study of the effects of
46 television news stories. *Am Sociol Rev* 802–809

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1
2 Boyd JH, Moscicki EK (1986), Firearms and youth suicide. *Am J Public Health* 1240–2
3
4 Brent DA (1997), The aftercare of adolescents with deliberate self-harm. *J Child Psychol*
5 *Psychiatry* 277–286
6
7 *Brent DA, Baugher M, Bridge J, Chen T, Chiappetta L (1999), Age- and sex-related risk
8 factors for adolescent suicide. *J Am Acad Child Adolesc Psychiatry* 1497–1505
9
10 Brent DA, Bridge J, Johnson BA, Connolly J (1996a), Suicidal behavior runs in families:
11 a controlled family study of adolescent suicide victims. *Arch Gen Psychiatry*
12 1145–1152
13
14 Brent DA, Holder D, Kolko D, Birmaher B, Baugher M, Roth C, Iyengar S, Johnson BA
15 (1997), A clinical psychotherapy trial for adolescent depression comparing
16 cognitive, family, and supportive therapy. *Arch Gen Psychiatry* 877–885
17
18 Brent DA, Johnson B, Bartle S, Bridge J, Rather C, Matta J, Connolly J, Constantine DJ
19 (1993a), Personality disorder, tendency to impulsive violence, and suicidal
20 behavior in adolescents. *J Am Acad Child Adolesc Psychiatry* 69–75
21
22 Brent DA, Johnson BA, Perper J, Connolly J, Bridge J, Bartle S, Rather C (1994a),
23 Personality disorder, personality traits, impulsive violence, and completed suicide
24 in adolescents. *J Am Acad Child Adolesc Psychiatry* 1080–6
25
26 * Brent DA, Moritz G, Bridge J, Perper J, Canobbio R (1996b), Long-term impact of
27 exposure to suicide: a three-year controlled follow-up. *J Am Acad Child Adolesc*
28 *Psychiatry* 646–653
29
30 Brent DA, Perper JA (1995), Research in adolescent suicide: implications for training,
31 service delivery, and public policy. *Suicide Life Threat Behav* 222–230
32
33 Brent DA, Perper JA, Allman CJ (1987), Alcohol, firearms, and suicide among youth:
34 temporal trends in Allegheny County, Pennsylvania, 1960 to 1983. *JAMA* 3369–
35 72
36
37 Brent DA, Perper JA, Allman CJ, Moritz GM, Wartella, ME, Zelenak, JP (1991), The
38 presence and accessibility of firearms in the homes of adolescent suicides: a case-
39 control study. *JAMA* 2989–2995
40
41 Brent DA, Perper JA, Goldstein CE, Kolko DJ, Allan MJ, Allman CJ, Zelenak JP (1988),
42 Risk factors for adolescent suicide: A comparison of adolescent suicide victims
43 with suicidal inpatients. *Arch Gen Psychiatry* 581–588
44
45 Brent DA, Perper J, Moritz G, Baugher M, Allman C (1993b), Suicide in adolescents
46 with no apparent psychopathology. *J Am Acad Child Adolesc Psychiatry* 494–500

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1
2 Brent DA, Perper JA, Moritz G, Baugher M, Schweers J, Roth C (1993c), Firearms and
3 adolescent suicide: a community case-control study. *Am J of Dis Child* 1066–
4 1071
5
6 Brent DA, Perper JA, Moritz G, Liotus L, Schweers J, Balach L, Roth C (1994b), Family
7 risk factors for adolescent suicide: a case-control study. *Acta Psychiatr Scand* 52–
8 58
9
10 Brent DA, Poling K (1989, revised 1997), *Cognitive Therapy Manual: for Depressed and*
11 *Suicidal Youth*. Western Psychiatric Institute and Clinic; University of Pittsburgh
12 Medical Center
13
14 Brent DA, Poling K, McKain B, Baugher M (1993d), A psychoeducational program for
15 families of affectively ill children and adolescents. *J Am Acad Child Adolesc*
16 *Psychiatry* 770–774
17
18 * Brown J, Cohen P, Johnson JG, Smailes EM (1999), Childhood abuse and neglect:
19 Specificity of effects on adolescent and young adult depression and suicidality. *J*
20 *Am Acad Child Adolesc Psychiatry* 1490–1496
21
22 Brown M, King E, Barraclough B (1995), Nine suicide pacts: a clinical study of a
23 consecutive series 1974–93. *Br J Psychiatry* 448–51
24
25 Carlson GA, Asarnow JR, Orbach I (1994), Developmental aspects of suicidal behavior
26 in children and developmentally delayed adolescents. In: *Children, Youth, and*
27 *Suicide: Developmental Perspectives* (New Directions for Child Development
28 Series, No. 64), Noam GG, Borst S, et al., eds. San Francisco, CA: Jossey-Bass
29 Inc., pp. 93–107
30
31 Carlsten A, Allebeck P, Brandt L (1996), Are suicide rates in Sweden associated with
32 changes in the prescribing of medicines? *Acta Psychiatr Scand* 94–100
33
34 Centers for Disease Control (1998), Youth risk behavior surveillance—United States,
35 1997. *MMWR* SS–3
36
37 Clark DC, Goebel AE (1996), Siblings of youth suicide victims. In: *Severe Stress and*
38 *Mental Disturbance in Children*, Pfeffer CR, ed. Washington, DC: American
39 Psychiatric Press
40
41 Clarke GN, Rohde P, Lewinsohn PM, Hops H, Seeley JR (1999), Cognitive-behavioral
42 treatment of adolescent depression: efficacy of acute group treatment and booster
43 sessions. *J Am Acad Child Adolesc Psychiatry* 272–9
44
45 Corbitt EM, Malone KM, Haas GL, Mann JJ (1996), Suicidal behavior in patients with
46 major depression and comorbid personality disorders. *J Affect Disord* 61–72

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1
2 Coté TR, Biggar RJ, Dannenberg AL (1992), Risk of suicide among persons with AIDS:
3 a national assessment. *JAMA* 2066–2068
4
- 5 Cummings P, Grossman DC, Rivara FP, Koepsell TD (1997a), State gun safe storage
6 laws and child mortality due to firearms. *JAMA* 1084–6
7
- 8 Cummings P, Koepsell TD, Grossman DC, Savarino J, Thompson RS (1997b), The
9 association between the purchase of a handgun and homicide or suicide. *Am J*
10 *Public Health* 974–8
11
- 12 Dannenberg AL, McNeil JG, Brundage JF, Brookmeyer R (1996), Suicide and HIV
13 infection. Mortality follow-up of 4147 HIV–positive military service applicants.
14 *JAMA* 1743–6
15
- 16 Davidson LE (1989), Suicide clusters and youth. In: *Suicide Among Youth: Perspectives*
17 *on Risk and Prevention*. Pfeffer CR, ed. Washington, DC: American Psychiatric
18 Press
19
- 20 Deykin EY, Alpert JJ, McNamara JJ (1985), A pilot study of the effect of exposure to
21 child abuse or neglect on adolescent suicidal behavior. *Am J Psychiatry* 1299–
22 1303
23
- 24 de Wilde EJ, Kienhorst IC, Diekstra RF, Wolters WH (1992), The relationship between
25 adolescent suicidal behavior and life events in childhood and adolescence. *Am J*
26 *Psychiatry* 45–51
27
- 28 Egan M.P, Rivera SG, Robillard RR, Hanson A (1997), The “no suicide contract”:
29 helpful or harmful? *J Psychosoc Nurs Ment Health Serv* 31–33
30
- 31 Elkin I, Shea MT, Watkins JT, Imber SD, Sotsky SM, Collins JF, Glass DR, Pilkonis PA,
32 Leber WR, Docherty JP (1989), National Institute of Mental Health Treatment of
33 Depression Collaborative Research Program. General effectiveness of treatments.
34 *Arch Gen Psychiatry* 971–82; discussion 983
35
- 36 Emslie G, Rush A, Weinberg W, et al. (1997), A double-blind, randomized placebo-
37 controlled trial of fluoxetine in children and adolescents with depression. *Arch*
38 *Gen Psychiatry* 1031–1037
39
- 40 Faulkner AH, Cranston K (1998), Correlates of same-sex sexual behavior in a random
41 sample of Massachusetts high school students. *Am J Public Health* 262–6
42
- 43 Fergusson DM, Horwood J, Beautrais AL (1999), Is sexual orientation related to mental
44 health problems and suicidality in young people? *Arch Gen Psychiatry* 876–880
45

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1 Fergusson DM, Lynskey MT (1995a), Antisocial behaviour, unintentional and intentional
2 injuries during adolescence. *Criminal Behaviour and Mental Health* 312–329
3
- 4 Fergusson DM, Lynskey MT (1995b), Suicide attempts and suicidal ideation in a birth
5 cohort of 16-year-old New Zealanders. *J Am Acad Child Adolesc Psychiatry*
6 1308–1317
7
- 8 Garofalo R, Wolf RC, Kessel S, Palfrey SJ, DuRant RH (1998), The association between
9 health risk behaviors and sexual orientation among a school-based sample of
10 adolescents. *Pediatrics* 895–902
11
- 12 Garofalo R, Wolf RC, Wissow LS, Woods ER, Goodman E (1999), Sexual orientation
13 and risk of suicide attempts among a representative sample of youth. *Arch Pediatr*
14 *Adolesc Med* 487–93
15
- 16 Garrison CZ, Lewinshon PM, Marsteller F, Langhinrichsen J, Lann I (1991), The
17 assessment of suicidal behavior in adolescents. *Suicide Life Threat Behav* 217–30
18
- 19 Gibbs JT (1997), African-American suicide: a cultural paradox. *Suicide Life Threat*
20 *Behav* 68–79
21
- 22 Goldston DB (in review), *Assessment of Suicidal Behaviors and Risk Among Children*
23 *and Adolescents*. Washington, DC: NIMH
24
- 25 Goldston DB, Reboussin DM, Kelley A, Ievers C, Brunstetter R (1996), First-time
26 suicide attempters, repeat attempters, and previous attempters on an adolescent
27 inpatient psychiatry unit. *J Am Acad Child Adolesc Psychiatry* 631–639
28
- 29 Gould MS (1990), Suicide clusters and media exposure. In: *Suicide Over the Life Cycle*,
30 Blumenthal SJ, Kupfer DJ, eds. Washington, DC: American Psychiatric Press
31
- 32 Gould MS, Fisher P, Parides M, Flory M, Shaffer D (1996), Psychosocial risk factors of
33 child and adolescent completed suicide. *Arch Gen Psychiatry* 1155–1162
34
- 35 * Gould MS, King R, Greenwald S, Fisher P, Schwab-Stone M, Kramer R, Flisher AJ,
36 Goodman S, Canino G, Shaffer D (1998), Psychopathology associated with
37 suicidal ideation and attempts among children and adolescents. *J Am Acad Child*
38 *Adolesc Psychiatry* 915–23
39
- 40 Gould MS, Kramer R (1999), *Reporting a Suicide* (brochure). New York: American
41 Foundation for Suicide Prevention
42
- 43 Gould MS, Shaffer D (1986), The impact of television movies: evidence of imitation. *N*
44 *Engl J Medicine* 690–694
45

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1 Greenhill L, Waslick B, Parides M, Fan B, Shaffer D, Mann J (1995), Biological studies
2 in suicidal adolescent inpatients. *Sci Proceed Ann Meet Am Acad Child Adolesc*
3 *Psychiatry* 124
4
- 5 Hafner H, Schmidtke A (1989), Do televised fictional suicide models produce suicides?
6 In: *Suicide Among Youth: Perspectives on Risk and Prevention*, Pfeffer CR, ed.
7 Washington, DC: American Psychiatric Press
8
- 9 Halperin JM, Sharma V, Siever LJ, Schwartz SD, Matier K, Wornell G, Newcorn JH
10 (1994), Serotonergic function in aggressive and nonaggressive boys with attention
11 deficit hyperactivity disorder. *Am J Psychiatry* 243–248
12
- 13 Hamilton MS, Opler LA (1992), Akathisia, suicidality, and fluoxetine. *J Clin Psychiatry*
14 401–6
15
- 16 Harrington R, Bredenkamp D, Groothues C, Rutter M, Fudge H, Pickles A (1994), Adult
17 outcomes of childhood and adolescent depression, III: links with suicidal
18 behaviours. *J Child Psychol Psychiatr* 1309–1319
19
- 20 Harrington R, Kerfoot M, Dyer E, McNiven F, Gill J, Harrington V, Woodham A,
21 Byford S (1998), Randomized trial of a home-based family intervention for
22 children who have deliberately poisoned themselves. *J Am Acad Child Adolesc*
23 *Psychiatry* 512–518
24
- 25 Hazell P, Lewin T (1993), Friends of adolescent suicide attempters and completers. *J Am*
26 *Acad Child Adolesc Psychiatry* 76–81
27
- 28 Hewitt PL, Newton J, Flett GL, Callander L (1997), Perfectionism and suicide ideation in
29 adolescent psychiatric patients. *J Abnorm Child Psychol* 95–101
30
- 31 Hollis C (1996), Depression, family environment, and adolescent suicidal behavior. *J Am*
32 *Acad Child Adolesc Psychiatry* 622–630
33
- 34 Jacobsen LK, Rabinowitz I, Popper MS, Solomon RJ, Sokol MS, Pfeffer CR (1994),
35 Interviewing prepubertal children about suicidal ideation and behavior. *J Am*
36 *Acad Child Adolesc Psychiatry* 439–452
37
- 38 Johnstone J, Huws R (1997), Autoerotic asphyxia: a case report. *J Sex Marital Ther* 326–
39 332
40
- 41 Juon HS, Ensminger ME (1997), Childhood, adolescent, and young adult predictors of
42 suicidal behaviors: a prospective study of African-Americans. *J Child Psychol*
43 *Psychiatry* 553–63
44
- 45 Kaplan SJ, Pelcovitz D, Salzinger S, Mandel F, Weiner M (1997), Adolescent physical
46 abuse and suicide attempts. *J Am Acad Child Adolesc Psychiatry* 799–808

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1
2 Katz P (1995), The psychotherapeutic treatment of suicidal adolescents. *Adolesc*
3 *Psychiatry* 325–341
4
- 5 Kazdin AE, Rodgers A, Golbus D (1986), The Hopelessness Scale for Children:
6 Psychometric characteristics and concurrent validity. *J Consult Clin Psychol* 241–
7 245.
8
- 9 Kellermann AL, Rivara FP, Somes G, Reay DT, Francisco J, Banton JG, Prodzinski J,
10 Fligner C, Hackman BB (1992), Suicide in the home in relation to gun ownership.
11 *N Engl J Med* 467–72
12
- 13 Kernberg P (1994), Psychological interventions for the suicidal adolescent. *Am J*
14 *Psychother* 52–63
15
- 16 Kienhorst ICWM, Wilde EJ, Diekstra RFW, Wolters WHG (1995), Adolescents' image
17 of their suicide attempt. *J Am Acad Child Adolesc Psychiatry* 623–628
18
- 19 King CA, Franzese R, Gargan S, McGovern L, Ghaziuddin N, Naylor MW (1995),
20 Suicide contagion among adolescents during acute psychiatric hospitalization.
21 *Psychiatr Services* 915–918
22
- 23 King CA, Hovey JD, Brand E, Wilson R (1997), Suicidal adolescents after
24 hospitalization: Parent and family impacts on treatment follow-through. *J Am*
25 *Acad Child Adolesc Psychiatry* 85–93
26
- 27 King RA, Riddle MA, Chappell PB, Hardin MT, Anderson GM, Lombroso P, Scahill L
28 (1991), Emergence of self-destructive phenomena in children and adolescents
29 during fluoxetine treatment. *J Am Acad Child Adolesc Psychiatry* 179–86
30
- 31 Kizer KW, Green M, Perkins CI, Doebbert G, Hughes MJ (1988), AIDS and suicide in
32 California. *JAMA* 1881
33
- 34 Klein PN, Lewinsohn PM, Seeley JR (1996), Hypomanic personality traits in a
35 community sample of adolescents. *J Affect Disord* 135–43
36
- 37 Klerman GL, Weissman MM, Rounsaville BJ (1984), *Interpersonal Psychotherapy of*
38 *Depression*. New York: Basic Books
39
- 40 Kovacs M, Goldston D, Gatsonis C (1993), Suicidal behaviors and childhood-onset
41 depressive disorders: a longitudinal investigation. *J Am Acad Child Adolesc*
42 *Psychiatry* 8–20
43
- 44 * Kruesi MJ, Grossman J, Pennington JM, Woodward PJ, Duda D, Hirsch JG (1999),
45 Suicide and violence prevention: parent education in the emergency department. *J*
46 *Am Acad Child Adolesc Psychiatry* 250–5

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1
2 Kruesi MJP, Hibbs ED, Zahn TP, Keysor CS, Hamburger SD, Bartko JJ, Rapoport JL
3 (1992), A two-year prospective follow-up study of children and adolescents with
4 disruptive behavior disorders: Prediction by cerebrospinal fluid 5-
5 hydroxyindoleacetic acid, homovanillic acid, and autonomic measures. *Arch Gen*
6 *Psychiatry* 429–435
7
8 Kruesi MJ, Swedo SE, Hamburger SD, Potter WZ, Rapoport JL (1988), Concentration
9 gradient of CSF monoamine metabolites in children and adolescents. *Biol*
10 *Psychiatry* 507–14
11
12 Letizia C, Kapik B, Flanders WD (1996), Suicidal risk during controlled clinical
13 investigations of fluvoxamine. *J Clin Psychiatry* 415–21
14
15 Lewinsohn PM, Rohde P, Seeley JR (1996), Adolescent suicidal ideation and attempts:
16 Prevalence, risk factors, and clinical implications. *Clin Psychol Sci Prac* 35–46
17
18 Linehan MM (1993a), *Cognitive Behavior Therapy of Borderline Personality Disorder*.
19 New York: Guilford Press
20
21 Linehan MM (1993b), *Skills Training Manual for Treating Borderline Personality*
22 *Disorder*. New York: Guilford Press
23
24 Linehan MM. The reasons for living inventory. (1985), In: *Innovations in Clinical*
25 *Practice: A Source Book*, Keller PA, Ritt LG, eds. Sarasota, FL: Professional
26 Resource Exchange, pp 321–330
27
28 Linehan MM, Chiles JA, Egan KJ, Devine RH, Laffaw JA (1986), Presenting problems
29 of parasuicides versus suicide ideators and nonsuicidal psychiatric patients. *J*
30 *Consult Clin Psychol* 880–1
31
32 Lock J, Steiner H (1999), Gay, lesbian, and bisexual youth risks for emotional, physical,
33 and social problems: results from a community-based survey. *J Am Acad Child*
34 *Adolesc Psychiatry* 297–304
35
36 Loftin C, McDowall D, Wiersema B, Cottey TJ (1991), Effects of restrictive licensing of
37 handguns on homicide and suicide in the District of Columbia. *N Engl J Med*
38 1615–20
39
40 Lucas CP, Shaffer D, Parides M, Wilcox H (1995), *Unstable reporting of suicidal*
41 *behavior and ideation*. Paper presented at XVIIth Congress of the International
42 Association for Suicide Prevention and Crisis Intervention, Venice, Italy.
43
44 Mann JJ (1998), The neurobiology of suicide. *Nat Med* 25–30
45

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1 Mann JJ, Kapur S (1991), The emergence of suicidal ideation and behavior during
2 antidepressant pharmacotherapy. *Arch Gen Psychiatry* 1027–33
3
- 4 * Mann JJ, Stoff DM (1997), A synthesis of current findings regarding neurobiological
5 correlates and treatment of suicidal behavior. *Ann NY Acad Sci* 352–63
6
- 7 Martin W (1984), Religiosity and United States suicide rates, 1972–1978. *J Clin Psychol*
8 1166–1169
9
- 10 Marttunen MJ, Henriksson MM, Aro HM, Heikkinen ME, Isometsa ET, Lonnqvist JK
11 (1995), Suicide among female adolescents: characteristics and comparison with
12 males in the age group 13 to 22 years. *J Am Acad Child Adolesc Psychiatry* 1297–
13 307
14
- 15 Marttunen MJ, Hillevi MA, Henriksson MM, Lonnqvist JK (1991), Mental disorders in
16 adolescent suicide: DSM-III-R axes I and II diagnoses in suicides among 13- to
17 19-year-olds in Finland. *Arch Gen Psychiatry* 834–839
18
- 19 Marttunen MJ, Hillevi MA, Lonnqvist JK (1992), Adolescent suicide: Endpoint of long-
20 term difficulties. *J Am Acad Child Adolesc Psychiatry* 649–654
21
- 22 Marzuk PM, Tardiff K, Leon AC, Hirsch CS, Hartwell N, Portera L, Iqbal MI (1997),
23 HIV seroprevalence among suicide victims in New York City, 1991–1993. *Am J*
24 *Psychiatry* 1720–5
25
- 26 Masand P, Dewan M (1991), Association of fluoxetine with suicidal ideation. *Am J*
27 *Psychiatry* 1603–4
28
- 29 Masand P, Gupta S, Dewan M (1991), Suicidal ideation related to fluoxetine treatment. *N*
30 *Engl J Med* 420
31
- 32 May PA (1987), Suicide and self-destruction among American Indian youths. *Am Indian*
33 *Alsk Native Ment Health Res Monogr Ser* 52–69
34
- 35 McLeavey BC, Daly JD, Ludgate JW, Murray CM (1994), Interpersonal problem-solving
36 skills training in the treatment of self-poisoning patients. *Suicide Life Threat*
37 *Behav* 382–394
38
- 39 McManus BL, Kruesi MJ, Dontes AE, Defazio CR, Piotrowski JT, Woodward PJ (1997),
40 Child and adolescent suicide attempts: an opportunity for emergency departments
41 to provide injury prevention education. *Am J Emerg Med* 357–60
42
- 43 Miller AL, Rathus JH, Linehan MM, Wetzler S, Leigh E (1997), Dialectical behavior
44 therapy adapted for suicidal adolescents. *Journal of Practical Psychiatry and*
45 *Behavioral Health* 78–86
46

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1 Miller KE, King CA, Shain BN, Naylor MW (1992), Suicidal adolescents' perceptions of
2 their family environment. *Suicide Life Threat Behav* 226–239
3
- 4 Miller MC, Jacobs DJ, Gutheil TG (1998), Talisman or taboo: the controversy of the
5 suicide-prevention contract. *Harv Rev Psychiatry* 78–87
6
- 7 Molnar BE, Shade SB, Kral AH, Booth RE, Watters JK (1998), Suicidal behavior and
8 sexual/physical abuse among street youth. *Child Abuse Negl* 213–222
9
- 10 * Montgomery SA, Montgomery D (1982), Pharmacological prevention of suicidal
11 behaviour. *J Affect Disord* 291–298
12
- 13 Montgomery SA (1997), Suicide and antidepressants. *Ann NY Acad Sci* 329–38
14
- 15 Montgomery SA, Dunner DL, Dunbar GC (1995), Reduction of suicidal thoughts with
16 paroxetine in comparison with reference antidepressants and placebo. *Eur*
17 *Neuropsychopharmacol* 5–13
18
- 19 Moscicki EK (1995), Epidemiology of suicide. *Int Psychogeriatr* 137–48
20
- 21 Mufson L, Moreau D, Weissman MM, Klerman GL (1993), *Interpersonal Psychotherapy*
22 *for Depressed Adolescents*. New York: Guilford Press
23
- 24 * Mufson L, Weissman MM, Moreau D, Garfinkel R (1999), Efficacy of interpersonal
25 psychotherapy for depressed adolescents. *Arch Gen Psychiatry* 56(6):573–9
26
- 27 Murphy GE (1998), Why women are less likely than men to commit suicide. *Compr*
28 *Psychiatry* 39(4):165–75
29
- 30 National Center for Health Statistics (Centers for Disease Control and Prevention)
31 (1999), data provided by Division of Vital Statistics, Mortality Statistics Branch.
32 Bethesda, MD: Author
33
- 34 National Center for Health Statistics (Centers for Disease Control and Prevention)
35 (2000), Death rates for 72 selected causes, by 5-year age groups, race, and sex:
36 United States, 1979–1997. Worktable GMWK 291 Trend B, plate 1 of 2, pages
37 485–490. Web site: <http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm>
38 (detailed statistical tables on mortality from NCHS's data warehouse)
39
- 40 Neeleman J (1998a), Regional suicide rates in the Netherlands: Does religion still play a
41 role? *Int J Epidemiol* 27(3):466–72
42
- 43 Neeleman J, Wessely S, Lewis G (1998b), Suicide acceptability in African- and white
44 Americans: the role of religion. *J Nerv Ment Dis* 186(1):12–6
45

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1 Nordstrom P, Samuelsson M, Asberg M, Traskman-Bendz L, Aberg-Wistedt A, Nordin
2 C, Bertilsson L (1994), CSF 5-HIAA predicts suicide risk after attempted suicide.
3 *Suicide Life Threat Behav* 24(1):1–9
4
- 5 Ohring R, Apter A, Ratzoni G, Weizman R, Tyano S, Plutchik R (1996), State and trait
6 anxiety in adolescent suicide attempters. *J Am Acad Child Adolesc Psychiatry*
7 35:154–157
8
- 9 * Olfson M, Marcus SC, Pincus HA, Zito JM, Thompson JW, Zarin DA. (1998),
10 Antidepressant prescribing practices of outpatient psychiatrists. *Arch Gen*
11 *Psychiatry* 55(4):310–6
12
- 13 Osman A, Downs WR, Kopper BA, Barrios FX, Baker MT, Osman JR, Besett TM,
14 Linehan MM.(1998), The Reasons for Living Inventory for Adolescents (RFL-A):
15 development and psychometric properties. *J Clin Psychol* 54(8):1063–78
16
- 17 * Pfeffer CR (1986), *The Suicidal Child*. New York: Guilford Press
18
- 19 Pfeffer CR (1989), Assessment of suicidal children and adolescents. *Psychiatr Clin N Am*
20 12:861–872
21
- 22 * Pfeffer CR (1997), Childhood suicidal behavior: a developmental perspective.
23 *Psychiatr Clin N Am* 20:551–562
24
- 25 Pfeffer CR (1990), Clinical perspectives on treatment of suicidal behavior among
26 children and adolescents. *Psychiatr Annals* 20:143–150
27
- 28 Pfeffer CR, Conte HR, Plutchik R, Jerret I (1979), Suicidal behavior in latency-age
29 children: an empirical study. *J Am Acad Child Psychiatry* 18:679–692.
- 30 Pfeffer CR, Jiang H, Kakuma T (2000), Child-Adolescent Suicidal Potential Index: A
31 screen for risk for early onset suicidal behavior. *Psychological Assessment* in
32 press
33
- 34 * Pfeffer CR, Klerman GK, Hurt SW, Kakuma T, Peskin JR, Siefker CA (1993), Suicidal
35 children grow up: rates and psychosocial risk factors for suicide attempts during
36 follow-up. *J Am Acad Child Adolesc Psychiatry* 32:106–113
37
- 38 Pfeffer CR, Klerman GL, Hurt SW, Lesser M, Peskin JR, Siefker CA (1991), Suicidal
39 children grow up: demographic and clinical risk factors for adolescent suicide
40 attempts. *J Am Acad Child Adolesc Psychiatry* 30:609–616
41
- 42 * Pfeffer CR, Martins P, Mann J, Sunkenberg M, Ice A, Damore J P, Gallo C, Karpenos
43 I, Jiang H (1997), Child survivors of suicide: psychosocial characteristics. *J Am*
44 *Acad Child Adolesc Psychiatry* 36:65–74
45

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1 Pfeffer CR, McBride PA, Anderson GM, Kakuma T, Fensterheim L, Khait V (1998),
2 Peripheral serotonin measures in prepubertal psychiatric inpatients and normal
3 children: Associations with suicidal behavior and its risk factors. *Biol Psychiatry*
4 44:568–577
5
- 6 Pfeffer CR, Normandin L, Kakuma T (1994), Suicidal children grow up: suicidal
7 behavior and psychiatric disorders among relatives. *J Am Acad Child Adolesc*
8 *Psychiatry* 33:1087–1097
9
- 10 Pfeffer CR, Trad PV (1988), Suicidality and sadness in pre-school children. *J Dev Behav*
11 *Pediatr* 9:86–88
12
- 13 Piacentini J, Rotheram-Borus MJ, Gillis JR, Graae F, Trautman P, Cantwell C, Garcia-
14 Leeds C, Shaffer D (1995), Demographic predictors of treatment attendance
15 among adolescent suicide attempters. *J Consult Clin Psychology* 63:469–473
16
- 17 Pine DS, Trautman PD, Shaffer D, Cohen L, Davies M, Stanley M, Parsons B (1995),
18 Seasonal rhythm of platelet [3 H] imipramine binding in adolescents who
19 attempted suicide. *Am J Psychiatry* 152:923–925
20
- 21 American Academy of Child and Adolescent Psychiatry (1998), Practice parameters for
22 the assessment and treatment of children and adolescents with depressive
23 disorders. *J Am Acad Child Adolesc Psychiatry* 37(10 suppl) 37:63S–83S
24
- 25 Rao U, Weissman MM, Martin JA, Hammond RW (1993), Childhood depression and
26 risk of suicide: a preliminary report of a longitudinal study. *J Am Acad Child*
27 *Adolesc Psychiatry* 32:21–27
28
- 29 Reid WH (1998), Promises, promises: don't rely on patients' no-suicide/no-violence
30 "contracts." *Journal of Practical Psychiatry and Behavioral Health* 4(5):316–318
31
- 32 Reid WH, Mason M, Hogan T (1998), Suicide prevention effects associated with
33 clozapine therapy in schizophrenia and schizoaffective disorder. *Psychiatr Serv*
34 49:1029–1033
35
- 36 Remafedi G, French S, Story M, Resnick MD, Blum R (1998), The relationship between
37 suicide risk and sexual orientation: results of a population-based study. *Am J*
38 *Public Health* 88(1):57–60
39
- 40 Reynolds WM. (1987), *Suicidal Ideation Questionnaire* (SIQ). Odessa, FL:
41 Psychological Assessment Resources, Inc., PO Box 998, Odessa, FL 33556
42
- 43 Rihmer Z, Rutz W, Pihlgran H (1995), Depression and suicide on Gotland: an intensive
44 study of all suicides before and after a depression-training programme for general
45 practitioners. *J Affect Disord* 35(4):147–52
46

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1 Robins ER, Murphy GE, Wilkinson RH, Gassner S, Kayes J (1959), Some clinical
2 considerations in the prevention of suicide based on a study of 134 successful
3 suicides. *Am J Public Health* 49:888–899
4
- 5 Rosenthal PA, Rosenthal S (1984), Suicidal behavior by preschool children. *Am J*
6 *Psychiatry* 141:520–525
7
- 8 Rotheram MJ (1987), Evaluation of imminent danger for suicide among youth. *Am J*
9 *Orthopsychiatry* 57:102–110
10
- 11 Rotheram-Borus MJ, Piacentini J, Miller S, Graae F, Castro-Blanco D (1996a), Toward
12 improving treatment adherence among adolescent suicide attempters. *Clin Child*
13 *Psychol Psychiatry* 1:99–108
14
- 15 * Rotheram-Borus MJ, Piacentini J, Van Rossem R, Graae F, Cantwell C, Castro-Blanco
16 D, Miller S, Feldman J (1996b), Enhancing treatment adherence with a
17 specialized emergency room program for adolescent suicide attempters. *J Am*
18 *Acad Child Adolesc Psychiatry* 35:654–663
19
- 20 Rotheram-Borus MJ, Walker JU, Ferns W (1996c), Suicidal behavior among middle-
21 class adolescents who seek crisis services. *J Clin Psychol* 52:137–143
22
- 23 Rothschild AJ, Locke CA (1991), Re-exposure to fluoxetine after serious suicide
24 attempts by three patients: the role of akathisia. *J Clin Psychiatry* 52(12):491–3
25
- 26 Ryan ND, Varma D (1998), Child and adolescent mood disorders: experience with
27 serotonin-based therapies. *Biol Psychiatry* 44:336–340
28
- 29 Sabbath JC (1969), The suicidal adolescent: the expendable child. *J Am Acad Child*
30 *Psychiatry* 8:272–289
31
- 32 Safer DJ (1997), Adolescent/adult differences in suicidal behavior and outcome. *Ann Clin*
33 *Psychiatry* 9:61–66
34
- 35 Sethi S, Seligman MEP (1993), Optimism and fundamentalism. *Psychological Science*
36 4(4):256–9
37
- 38 Shaffer D, Craft L (1999), Methods of adolescent suicide prevention. *J Clin Psychiatry*
39 60(suppl 2):70–74
40
- 41 Shaffer D, Garland A, Gould M, Fisher P, Trautman P (1988), Preventing teenage
42 suicide: a critical review. *J Am Acad Child Adolesc Psychiatry* 27:675–687
43
- 44 Shaffer D, Garland A, Vieland V, Underwood M, Busner C (1991), The impact of
45 curriculum-based suicide prevention programs for teenagers. *J Am Acad Child*
46 *Adolesc Psychiatry* 30(4):588–96

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1
2 * Shaffer D, Gould MS, Fisher P Trautman P, Moreau D, Kleinman M, Flory M (1996a),
3 Psychiatric diagnosis in child and adolescent suicide. *Arch Gen Psychiatry*
4 53:339–348
5
6 Shaffer D, Gould M, Hicks RC (1994), Worsening suicide rate in black teenagers. *Am J*
7 *Psychiatry* 151:1810–1812
8
9 Shaffer D, Vieland V, Garland A, Rojas M, Underwood M, Busner C (1990), Adolescent
10 suicide attempters: response to suicide-prevention programs. *JAMA*
11 264(24):3151–5
12
13 Shaffer D, Wilcox H, Lucas C, Hicks R, Busner C, Parides M (1996b), *The development*
14 *of a screening instrument for teens at risk for suicide*. Poster presented at the
15 1996 meeting of the Academy of Child and Adolescent Psychiatry, New York
16
17 Shea MT, Elkin I, Imber SD, Sotsky SM, Watkins JT, Collins JF, Pilkonis PA, Beckham
18 E, Glass DR, Dolan RT (1992), Course of depressive symptoms over follow-up:
19 findings from the National Institute of Mental Health Treatment of Depression
20 Collaborative Research Program. *Arch Gen Psychiatry* 49(10):782–7
21
22 Sheehan W, Garfinkel BD (1988), Case study: adolescent autoerotic deaths. *J Am Acad*
23 *Child Adolesc Psychiatry* 27:367–370
24
25 Silverman AB, Reinherz HZ, Giaconia RM (1996), The long-term sequelae of child and
26 adolescent abuse: a longitudinal community study. *Child Abuse Negl* 20:709–723
27
28 Simon RI (1991), The suicide-prevention pact: Clinical and legal considerations. In:
29 *American Psychiatric Press Review of Clinical Psychiatry and the Law II*, Simon
30 RI, ed. Washington, DC: American Psychiatric Press, pp 441–451
31
32 Spirito A (1997), Individual therapy techniques with adolescent suicide attempters. *Crisis*
33 18:62–64
34
35 Spirito A, Overholser J, Ashworth S, Morgan J, Benedict-Drew C (1988a), Evaluation of
36 a suicide awareness curriculum for high-school students. *J Am Acad Child*
37 *Adolesc Psychiatry* 27(6):705–11
38
39 Spirito A, Williams CA, Stark LJ, Hart KJ (1988b), The hopelessness scale for children:
40 psychometric properties with normal and emotionally disturbed adolescents. *J*
41 *Abnorm Psychol* 16(4):445–458
42
43 Spivak B, Roitman S, Vered Y, Mester R, Graff E, Talmon Y (1998), Diminished
44 suicidal and aggressive behavior, high plasma norepinephrine levels, and serum
45 triglyceride levels in chronic neuroleptic-resistant schizophrenic patients
46 maintained on clozapine. *Clin Neuropharmacol* 21:245–250

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- 1
2 Statham DJ, Heath AC, Madden PA, Bucholz KK, Bierut L, Dinwiddie SH, Slutske WS,
3 Dunne MP, Martin NG (1998), Suicidal behaviour: an epidemiological and
4 genetic study. *Psychol Med* 28(4):839–55
5
6 Stein D, Apter A, Ratzoni G, Har-Even D, Avidan G (1998), Association between
7 multiple suicide attempts and negative affects in adolescents. *J Am Acad Child*
8 *Adolesc Psychiatry* 37:488–494
9
10 Tatman SM, Greene AL, Karr LC (1993), Use of the Suicide Probability Scale (SPS)
11 with adolescents. *Suicide Life Threat Behav* 23(3):188–203
12
13 Teicher MH, Glod C, Cole JO (1990), Emergence of intense suicidal preoccupation
14 during fluoxetine treatment. *Am J Psychiatry* 147(2):207–10
15
16 Tondo L, Jamison KR, Baldessarini RJ (1997), Effect of lithium maintenance on suicidal
17 behavior in major mood disorders. *Ann N Y Acad Sci* 836(Dec 29):339–51
18
19 Velting DM, Gould MS (1997), Suicide contagion. In: *Review of Suicidology*, Maris RW,
20 Silverman MM, eds. New York: The Guilford Press, pp 96–137
21
22 Vieland V, Whittle B, Garland A, Hicks R, Shaffer D (1991), The impact of curriculum-
23 based suicide prevention programs for teenagers: an 18-month follow-up. *J Am*
24 *Acad Child Adolesc Psychiatry* 30(5):811–5
25
26 Wallace JD, Calhoun AD, Powell KE, O’Neil J, James SP (1996), *Homicide and Suicide*
27 *among Native Americans, 1979–1992* (Violence Surveillance Series, No. 2).
28 Atlanta, GA: Centers for Disease Control and Prevention, National Center for
29 Injury Prevention and Control
30
31 Weissman MM (1979), The psychological treatment of depression. Evidence for the
32 efficacy of psychotherapy alone, in comparison with, and in combination with
33 pharmacotherapy. *Arch Gen Psychiatry* 36(11):1261–9
34
35 Wernicke JF, Sayler ME, Koke SC, Pearson DK, Tollefson GD (1997), Fluoxetine and
36 concomitant centrally acting medication use during clinical trials of depression:
37 The absence of an effect related to agitation and suicidal behavior. *Depress*
38 *Anxiety* 6(1):31–9
39

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Appendix I: Selected Web Sites with Suicide Facts and Resources

The following is a list of Web sites that may be relevant to the clinician seeking more information or to the family and friends of a suicidal youth. These Web sites were obtained by an internet search on the keywords "suicide" and "suicide prevention" through various search engines on May 1, 1999. The list below is by no means comprehensive. Sites were selected that represented well-known organizations dealing with suicide and mental illness in the United States and other English-speaking countries.

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<http://www.aacap.org/>

Facts for Families: *Teen Suicide* <http://www.aacap.org/publications/factsfam/suicide.htm>;
The Depressed Child <http://www.aacap.org/publications/factsfam/depressd.htm>; *Manic-Depressive Disorder in Teens* <http://www.aacap.org/publications/factsfam/bipolar.htm>;
Gay and Lesbian Teens <http://www.aacap.org/publications/factsfam/63.htm>

AMERICAN ASSOCIATION OF SUICIDOLOGY

<http://www.suicidology.org/>

AMERICAN FOUNDATION FOR SUICIDE PREVENTION

<http://www.afsp.org/>

Excellent site with links to research articles and youth-suicide facts. Has information for those interested in pursuing research.

AMERICAN PSYCHIATRIC ASSOCIATION

Teen Suicide <http://www.psych.org/>

Good summary for parents and peers listing where to get help.

AUSTRALIAN NATIONAL YOUTH SUICIDE PREVENTION STRATEGY COMMUNICATIONS PROJECT

<http://www.aifs.org.au/external/ysp/ysplinks.html>

Guide to many excellent Australian Web sites listing prevention strategies and resources.

CANADIAN ASSOCIATION FOR SUICIDE PREVENTION

Community Lifelines <http://www3.sympatico.ca/masecard/>

Non-profit national Canadian association. Text in French and English.

CENTERS FOR DISEASE CONTROL

CDC Prevention Guidelines: *Programs for the Prevention of Suicide Among Adolescents and Young Adults (1994)* <http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/m0031525/m0031525.htm>; *Suicide Contagion and the Reporting of Suicide: Recommendations from a National Workshop (1994)* <http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/m0031539/m0031539.htm>; *Youth Suicide Prevention Programs: A Resource Guide (1992)* <http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000024/p0000024.htm>;
CDC Recommendations for a Community Plan for the Prevention and Containment of

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1 *Suicide Clusters (1988)* [http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000214/
2 p0000214.htm](http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000214/p0000214.htm)

3 National Center for Injury Prevention and Control: *Suicide and Violence (fact sheet)*
4 <http://www.cdc.gov/ncipc/dvp/suifacts.htm>

5

6 **NATIONAL DEPRESSIVE AND MANIC-DEPRESSIVE ASSOCIATION**

7 <http://www.ndmda.org/>

8 *Suicide* <http://www.ndmda.org/suicide.htm>; *Suicide and Depressive Illness Booklet*

9 <http://www.ndmda.org/suicide.htm#Suicide> and Depressive Illness

10 Many excellent links on suicide and child and adolescent depression and manic
11 depression for family and patients.

12

13 **NATIONAL INSTITUTE OF MENTAL HEALTH (NIMH)**

14 *Suicide Research Consortium* <http://www.nimh.nih.gov/research/suicide.htm>

15 Has suicide fact sheet, epidemiological information, bibliographies, and information for
16 those interested in pursuing research

17

18 **PREVENTION YELLOW PAGES**

19 *Suicide* <http://www.tyc.state.tx.us/prevention/40001ref.html#SUI>

20 Reference list for many recent research articles on programs designed to prevent youth
21 suicide.

22

23 **SUICIDE INFORMATION AND EDUCATION CENTRE (SIEC)**

24 <http://www.siec.ca/>

25 Extensive resources provided, as well as answers to frequently asked questions and
26 library resources.

27

28 **SITES FOR SURVIVORS**

29 *1000 Deaths (by Christine Smith)* <http://www.1000deaths.com/>

30

31 **EMAIL SUPPORT FOR SURVIVORS**

32 suicide-survivors-request@research.canon.com.au

33

1 **Appendix II: Media Guidelines for Clinicians and Reporters**

2
3 **GENERAL CONCERNS AND RECOMMENDATIONS**

4 *Source: Centers for Disease Control and Prevention, Prevention Guidelines Database (1994). Suicide*
5 *Contagion and the Reporting of Suicide: Recommendations from a National Workshop MMWR 43(RR-*
6 *6):9–18 (<http://aepo-xdv www.epo.cdc.gov/wonder/prevguid/m0031539/m0031539.htm>)*
7

8 The following concerns and recommendations should be reviewed and understood by
9 health professionals, suicidologists, public officials, and others who provide information
10 for the reporting of suicide:

- 11
- 12 • Suicide is often newsworthy, and it will probably be reported. The mission of a news
13 organization is to report to the public information on events in the community. If a
14 suicide is considered newsworthy, it will probably be reported. Health-care providers
15 should realize that efforts to prevent news coverage may not be effective, and their
16 goal should be to assist news professionals in their efforts toward responsible and
17 accurate reporting.
- 18 • “No comment” is not a productive response to media representatives who are
19 covering a suicide story. Refusing to speak with the media does not prevent coverage
20 of a suicide; rather, it precludes an opportunity to influence what will be contained in
21 the report. Nevertheless, public officials should not feel obligated to provide an
22 immediate answer to difficult questions. They should, however, be prepared to
23 provide a reasonable timetable for giving such answers or be able to direct the media
24 to someone who can provide the answers.
- 25 • All parties should understand that a scientific basis exists for concern that news
26 coverage of suicide may contribute to the causation of suicide. Efforts by persons
27 trying to minimize suicide contagion are easily misinterpreted. Health officials must
28 take the time to explain the carefully established, scientific basis for their concern
29 about suicide contagion and how the potential for contagion can be reduced by
30 responsible reporting.
- 31 • Some characteristics of news coverage of suicide may contribute to contagion, and
32 other characteristics may help prevent suicide. Clinicians and researchers
33 acknowledge that it is not news coverage of suicide per se, but certain types of news
34 coverage, that promote contagion. Persons concerned with preventing suicide
35 contagion should be aware that certain characteristics of news coverage, rather than
36 news coverage itself, should be avoided.
- 37 • Health professionals or other public officials should not try to tell reporters what to
38 report or how to write the news regarding suicide. If the nature and apparent
39 mechanisms of suicide contagion are understood, the news media are more likely to
40 present the news in a manner that minimizes the likelihood of such contagion. Instead
41 of dictating what should be reported, public officials should explain the potential for
42 suicide contagion associated with certain types of reports and should suggest ways to
43 minimize the risk for contagion.
- 44 • Public officials and the news media should carefully consider what is to be said and
45 reported regarding suicide. Reporters generally present the information that they are
46 given. Impromptu comments about a suicide by a public official can result in harmful

1 news coverage. Given the potential risks, public officials and the media should seek
2 to minimize these risks by carefully considering what is to be said and reported
3 regarding suicide.
4

5 **ASPECTS OF NEWS COVERAGE THAT CAN PROMOTE SUICIDE**
6 **CONTAGION**

7 *Source:* American Foundation for the Prevention of Suicide, Gould MS, Kramer R. Reporting a suicide.
8 American Foundation for the Prevention of Suicide, 120 Wall Street, 22nd Floor, New York, NY 10025;
9 (212) 363-3500; www.afsp.org.
10

11 The American Foundation for Suicide Prevention has issued the following good
12 suggestions, developed by Madelyn Gould, Ph.D., and Rachel Kramer, Sc.D., for how
13 journalists might be able to minimize the risk of inducing suicidal behavior.
14

- 15 • It is misleading to present suicide as the inexplicable act of an otherwise “healthy”
16 person. Acknowledge the multi-determined nature of suicide, particularly the
17 underlying psychiatric problems that may not be immediately apparent to an outside
18 observer.
- 19 • Communicate that suicide is preventable by providing models of effective treatment.
20 Provide resources for further information and help.
- 21 • Question if the suicide is unusual or newsworthy. People may not need to be
22 informed about all suicides.
- 23 • Be mindful that pictures of the victim and/or grieving relatives and friends may foster
24 a pathological identification with the victim and inadvertently glorify the death.
- 25 • Avoid excessive and prominent coverage.
- 26 • Try to oversee headlines. Inappropriate headlines can detract from an otherwise
27 helpful story.
- 28 • Limit detailed description of method, to avoid modeling behavior.