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#### Introduction

Youth suicide (i.e., self-inflicted injury resulting in death) and suicide attempts (i.e., self-inflicted injury with intent to die) constitute a major public health problem in the United States. Suicide is a leading cause of death for 10- to 24-year-olds (American Academy of Child and Adolescent Psychiatry [AACAP], 2013; Centers for Disease Control and Prevention [CDC], 2015). In 2013, for children ages five to 14, the most frequent causes of death were cancer (one per 100,000), suicide (one per 100,000), and birth defects (one per 100,000 children) (Federal Interagency Forum on Child and Family Statistics, 2015). However, for adolescents ages 15 to 19, almost three-fourths of their deaths were from injuries, with suicides accounting for 25 percent of these injury deaths. In ages 10 to 14, there has been a 128 percent increase in suicides since 1980 (The Jason Foundation, 2016). In Virginia, 49 children and adolescents between the ages five and 19 committed suicide in 2013 (Virginia Department of Health, Office of the Chief Medical Examiner, 2013). In fact, suicide ranked third for cause of death among 10- to 24-year-olds in Virginia (Virginia Performs, 2016).

Deaths from suicide are only part of the problem. More young people survive suicide attempts than die from them. Every two years, the CDC conducts a nationwide survey of youth in grades 9 through 12 in the United States. The Youth Risk Behavior Surveillance System (YRBSS) gathers information on priority health risk behaviors among youth, including five suicide-related behaviors: feeling sad or hopeless; seriously considering attempting suicide; making a suicide plan; attempting suicide; and making a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (CDC, 2014). In 2013, 17 percent of students reported seriously considering suicide, 13.6 percent reported creating a plan, and 8 percent reported trying to take their own life in the 12 months preceding the survey (CDC). In addition, each year, approximately 157,000 youth between the ages of 10 and 24 receive medical care for self-inflicted injuries at emergency departments across the U.S. (CDC, 2015).

Nationwide, firearms are the most common method of suicide for youth, followed by suffocation and poisoning (CDC). Suicide methods also vary by age. Table 1 summarizes suicide methods by age in Virginia.

Table 1
Suicide Methods Within Age Groups in Virginia

Age Group	Method of Suicide			
	Firearms	Hanging/Suffocation	Poison	
10 – 14 years old	34%	62.3%	3.8%	
15 – 19 years old	50%	38%	less than 10%	

Source: Jansson, 2016.

There has been increasing attention paid to the issues of suicide and suicide prevention. In 1999, the U.S. Surgeon General issued a "Call to Action" emphasizing the need for greater awareness of this national problem (U.S. Department of Health and Human Services [HHS], 2001). Shortly thereafter, HHS published *National Strategy for Suicide Prevention* to address issues such as collaboration with agencies and stakeholders (Vetter, 2002). In 2012, the Office of the U.S. Surgeon General and the National Action Alliance for Suicide Prevention issued a revised *National Strategy for Suicide Prevention*. The revised *Strategy* provides guidance for schools, businesses, health systems, clinicians, and many other sectors. It reflects advancements in the field since the last *Strategy* was published (HHS, Office of the Surgeon General and National Action Alliance for Suicide Prevention, 2012).

It is important to note that, although non-suicidal self-injury (NSSI) is very serious, the individual's intention and ambivalence about the outcome distinguish it from suicidal behavior (Miller, Rathus, & Linehan, 2007). A more detailed discussion of this disorder is included in the "Non-Suicidal Self-Injury" section of the *Collection*.

## Recent Changes from the DSM-IV to the DSM-5

In 2013, the American Psychiatric Association (APA) released the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*. Suicidal behavior disorder was included as a condition for further study and proposed criteria were included to encourage future research (APA, 2013). The proposed criteria for this condition include the following:

- A suicide attempt within the past 24 hours;
- The act does not meet criteria for non-suicidal self-injury, thus it is not intended to relieve stress or to achieve a positive mood;
- The diagnosis is not applied to suicidal ideation or to preparatory acts;
- The act was not carried out during a state of delirium or confusion; and
- The act was not undertaken for a political or religious purpose (APA, 2013).

The *DSM-5* is a manual for assessment and diagnosis of mental health disorders and does not include information for treatment of any disorder. In the future, more evidence supporting treatments of disorders with *DSM-5* classifications will be available as clinical studies utilizing *DSM-5* criteria are conducted. As a result, this *Collection* will reference studies that utilize *Diagnostic and Statistical Manual, Fourth Edition (DSM-IV)* diagnostic criteria to explain risk factors and treatment approaches.

#### **Risk Factors**

While there are important risk factors to note, the presence of risk factors does not necessarily mean a youth will commit suicide. It is important to have a communication system in place that allows the youth to express his or her feelings (CDC, 2015). Talking about suicide is difficult, but with more open communication and less stigmatization, it could be an easier subject to broach (CDC).

The following paragraphs discuss a range of characteristics and factors associated with the risks of youth suicide.

## Individual/Demographic Characteristics

Research on who commits suicide clearly shows that adolescent females attempt suicide at a rate two times higher than adolescent males, but that males are more likely to die from their suicide attempts (CDC, 2015). Of the reported suicides in the 10 to 24 age group, 81 percent of deaths were males and 19 percent were females. Notably, suicidal thoughts and behaviors are relatively rare in childhood but increase drastically during the transition to adolescence (Glenn & Nock, 2014).

Cultural variations in suicide rates also exist. Caucasian females, African American females, and Hispanic females are more likely to seriously consider attempting suicide than Caucasian males, African American males, and Hispanic males, respectively (CDC, 2014). Native American/Alaskan Native youth have the highest rates of suicide-related fatalities (CDC, 2015). A nationwide survey of youth in grades 9 – 12 in public and private schools in the U.S. found that Hispanic youth were more likely to report attempting suicide than their African-American and Caucasian non-Hispanic peers (CDC, 2015).

Evidence of any linkage between socioeconomic status and suicide is sparse and difficult to interpret. Gould, Shaffer, and Greenberg reported that one study examining the socioeconomic status of youth who committed suicide found no difference in status (2003). Another study found that low-income Latino and Caucasian youth and middle-income African American youth had higher rates of suicide than their counterparts in higher income groups (Gould, Shaffer, & Greenberg, 2003).

Sexual orientation may increase the likelihood of suicide attempts. Among lesbian, gay, bisexual, and transgender (LGBT) adolescents, a history of attempted suicide, impulsivity, prospective LGBT victimization, and limited social supports were linked to increased risk for suicidal ideation (Liu & Mustanski, 2012). However, factors not linked to LGBT status, including those factors outlined in this section, were more likely to lead to suicide than LGBT status alone (Liu & Mustanski).

#### Psychological Characteristics

There are a number of psychological disorders associated with increased risk of suicide. These include major depressive disorder, bipolar disorder, substance abuse, and conduct disorder (McKeown, Cuffe, & Schultz, 2006). A study of the most common influencing factors in youth revealed that mental health issues were common; 37 percent of decedents were reported to have a depressed mood and/or current mental health problems prior to their suicide (Karch, Logan, McDaniel, Floyd, & Vagi, 2012). Other studies found than 90 percent of adolescents who commit suicide suffered from at least one psychiatric disorder at the time of death, and that more than half suffered from a psychiatric disorder for at least two years preceding the event (AACAP, 2001; Gould, Shaffer, & Greenberg, 2003).

Depression has been consistently identified as the most common psychological disorder among adolescents who have committed suicide (Gould, Shaffer, & Greenberg; APA, 2013). Additionally, there is a high prevalence of substance abuse among older adolescents, particularly males, who commit suicide (Gould, Shaffer, & Greenberg). There is also a particularly high prevalence of co-occurring depressive disorders and substance abuse among those who commit suicide (Gould, Shaffer, & Greenberg). Another strong predictor is suicidal or homicidal ideation (McKeown, Cuffe, & Schultz; Miller, Rakthus, & Linehan, 2007; Spirito & Overholser, 2003). However, although depression is a strong predictor of suicide ideation, it does not predict which youth with ideation will attempt suicide. Disorders characterized by anxiety, agitation, and poor behavioral control may best predict the transition from ideation to attempt (Nock, Hwang, Sampson, & Kessler, 2010). Other high risk factors include a history of suicide attempts and NSSI. Although NSSI differs from suicidal behaviors because of non-lethal intent,

researchers have consistently found that young adults who engage in NSSI are at increased risk for suicidal behavior compared to individuals who do not engage in NSSI (Hamza & Willoughby, 2013).

A recent study was conducted to estimate lifetime prevalence of suicidal behaviors among U.S. adolescents and retrospectively reported mental health disorders with the onset of suicidal behaviors (Nock et al., 2013). This study found that the vast majority of adolescents with these behaviors had preexisting mental disorders. Most suicidal adolescents (greater than 80 percent) had received some form of mental health treatment. In most cases (greater than 55 percent), treatment started prior to onset of suicidal behaviors but failed to prevent these behaviors from occurring. Other research has suggested that less than half of teens who attempt suicide received mental health services in the year prior to their attempt (CDC, 2014).

Another study revealed that most adolescents who are considering suicide or who have attempted suicide do not receive specialized mental health services (Husky et al., 2012). Data was analyzed from the National Comorbidity Survey-Adolescent Supplement (NCS-A), a nationally representative, face-to-face survey of more than 10,000 teens ages 13 to 18. These adolescents were asked whether they had any suicidal thoughts, plans, or actions over a one-year period prior to the survey. They also completed a structured diagnostic interview regarding the full range of mental disorders including mood, anxiety, eating, and anxiety disorders, and whether they had received treatment for emotional or behavioral problems in the past 12 months. The study revealed that suicidal behavior among youth was not only associated with major depression, but also with a range of other mental health problems including eating disorders, anxiety disorders, substance use, and behavior disorders, as well as physical health problems. Between 50 and 75 percent of adolescents reporting suicidal ideation had recent contact with a service provider. However, most only had three or fewer visits, suggesting that treatment tended to be terminated prematurely. Moreover, most teens with suicidal ideation did not receive specialized mental health care.

#### Other Risk Factors

There are a number of environmental factors and distressing experiences associated with increased risk of suicide. Youth most at risk of attempting suicide are likely to have recently experienced stressful life events, such as school and work problems, legal problems, and interpersonal conflict (Gould, Shaffer, & Greenberg, 2003). Research suggests that parental divorce and strained parent-child relationships may be factors, after accounting for parent and youth psychopathology (Gould, Shaffer, & Greenberg). One national study reported that 35 percent of youth suicides occurred the same day those youth experienced a crisis, such as a relationship breakup or an argument with a parent (Virginia Department of Health, 2012). Another study found that non-intimate-partner relationship problems, such as issues with parents or friends, preceded over 51 percent of suicides in the study, and a crisis that occurred in the past two weeks preceded 42.4 percent of suicides (Karch et al., 2012).

McKeown, Cuffe, and Schultz (2006) found that the presence of firearms in the home is significantly associated with higher rates of suicide. This is in line with findings from a study that found that firearms account for the greatest number of suicides among older youth and young adults (Gould, Shaffer, & Greenberg, 2003). It is important to note that evidence suggests keeping firearms locked and eliminating unsupervised exposure to firearms may decrease the likelihood of youth suicide involving firearms (Hawton, Saunders, & O'Conner, 2012).

There is strong research evidence to suggest that abuse, both physical and sexual, is associated with increased risk of youth suicide (Gould, Shaffer, & Greenberg, 2003).

Family environment and genetic factors are associated with increased risk for suicide among youth. Additionally, family history of suicide and suicide attempts and parental psychopathology have been associated with increased risk for youth suicide (Gould, Shaffer, & Greenberg, 2003). Even after accounting for the effects of parental psychopathology, a completed suicide by the mother corresponded

with a fivefold increase in suicide by offspring, while a completed suicide by the father corresponded with a doubling of suicide rates by offspring (Gould, Shaffer, & Greenberg). Studies conducted with twins indicate that at least part of this increased suicidal risk could be attributed to genetic factors (Gould, Shaffer, & Greenberg).

While suicide may have a genetic link, exposure to suicide may also increase the likelihood of suicidality, especially in adolescents (Swanson & Coleman, 2013). Some studies have found that the suicide rate among adolescents rises following a highly publicized suicide (Swanson & Coleman, 2013). This likelihood of co-occurring suicide is also referred to as "contagion" or "clustering" (Swanson & Colman). Co-occurring suicide may occur when a classmate or someone with whom the youth has a personal relationship commits suicide (Swanson & Colman). The associations between both ideation and attempts remained for at least two years after the initial exposure, suggesting that intervention and therapy should extend past the first few months following a suicide (Swanson & Coleman).

Studies have also found that sleep disturbance has been associated with an elevated risk of suicide in youth (Emslie et al.; Goldstein et al., as cited by Wolfe, Foxwell, & Kennard, 2014). Assessing sleep may reveal prognostic indicators for suicidal patients, inform clinical decision-making, and guide the development of more precise risk models for suicide. As a warning sign, sleep may thus be a particularly useful factor, and a clinically meaningful intervention tool, to assess in the presence of suicidal ideation and depression (Amitai & Apter, 2012).

Based on a review of 31 articles, researchers found a clear relationship between both bullying (victimization and perpetration) and suicidal ideation and behavior in children and adolescents (Klomek, Sourander, & Gould, 2010). Females were at risk regardless of frequency, whereas males were at higher risk only with frequent bullying. One review cited evidence that bullying victimization is associated with severe baseline psychopathology, as well as individual characteristics and family factors, and that the psychopathology is made significantly worse by the victimization. Being the victim of school bullying or cyberbullying is associated with substantial distress, resulting in lower school performance and school attachment. Suicidal ideation and behavior were greater in those bullied with controlling for age, gender, race/ethnicity, and depressive symptomology (Klomek, Sourander, & Gould).

#### **Assessment**

Every psychological assessment by a clinician should include an assessment of the youth's risk of suicide (Lloyd-Richardson, 2008; Nock, Teper, & Hollender, 2007). Clinicians should keep in mind that, although parents are an important source of information, research has shown that parents tend to underreport their children's NSSI (Nock, Holmburg, Photos, & Michel, 2007), thus making direct assessment critically important. Clinicians should further evaluate every youth who reports thoughts of suicide even though thoughts about death do not always indicate severe psychopathology (Suicide Prevention Resource Center [SPRC], 2011). While suicide ideation is an important indication of risk for suicide (90 percent of youth who attempted suicide had previously reported suicide ideation), not every youth who reports thinking about death, hurting themselves, or ending their lives will attempt suicide (Spirto & Overholser, 2003). The severity of hopelessness, isolation, suicidal ideation, and hesitation to discuss their suicidal thoughts are factors that may differentiate between youth who only contemplate death and suicide and those who, in fact, attempt suicide.

The following guidelines may help assess the level of suicide risk in children and adolescents. These minimum standards should apply in almost all cases, and the youth's medical record should support instances where these standards are not followed. Figure 1 outlines the assessment guidelines for youth suspected of having suicidal thoughts.

## Figure 1 Youth Suicide Assessment Guidelines

Important questions to ask when conducting a youth suicide assessment:

To what degree is the youth in a high-risk group for suicide?

- Is the youth male? (Males are higher risk than females.)
- Has the youth made past suicide attempts?
- Does the youth have a mood disorder? A conduct disorder?
- If male, does the youth use substances?
- Is the youth aggressive or has he or she gotten into fights?
- Does the youth live in a violent community?
- Has the youth engaged in self-mutilation or self-harm in the past?
- If male, is the youth older than 16?

To what degree is a youth who has attempted suicide still at high risk for suicide?

- Is the youth still thinking about committing suicide?
- Did the youth use a method other than ingestion or superficial cutting?
- Is the youth older than 16?
- Is the youth male?
- Is the youth living alone?
- Is the youth currently depressed, manic, hypomanic, severely anxious, or a combination of these?
- Does the youth use substances?
- Is the youth irritable, agitated, delusional, or hallucinating, or has he or she threatened violence against others?

If there is a recent history of suicidal ideation or suicidal behavior, the youth should continue to be monitored.

Sources: American Foundation for Suicide Prevention (AFSP), 2014a; CDC, 2014.

In addition, there are a number of standardized suicide measures that range from long and comprehensive to short screeners. These are described in Table 2.

The Suicide Ideation Questionnaire (SIQ) (Spirito & Overholser, 2003; Goldston & Compton, 2007) is a short self-report questionnaire that includes versions for both younger and older youth and addresses frequency, intensity, duration, and specificity of suicidal thoughts (Spirito & Overholser). The High School Questionnaire is a multi-component questionnaire comprised of the Suicide Risk Screen (SRS) and the Measure of Adolescent Potential for Suicide (MAPS) (Goldston & Compton, 2007). The SRS is a brief measure that assesses past suicidal behavior, suicidal thoughts, and psychopathology (Thompson & Eggert, 1999). MAPS is a computer-administered, self-report measure that can decrease the likelihood of suicide (Spirito & Overholser). This questionnaire assesses the following:

- Direct risk factors, including exposure to suicidal behavior, attitudes/beliefs about suicide, suicide ideation, suicide plans, and past suicide attempts;
- Related risk factors, such as anger, anxiety, depression, and hopelessness; and
- Protective factors, including support, self-esteem, coping, and personal control.

The drawback to the MAPS is its length, which is two hours for administration of the full measure.

Table 2
Summary of Assessment Tools

Assessment Tool	Туре	Length	Description
Suicide Ideation Questionnaire (SIQ)	Self- report	Variable	A self-report measure that assesses suicidal thoughts (15 questions for youth in grades $7-9$ ; 30 for youth in grades $10-12$ )
High School Questionnaire (SRS and MAPS)	Self- report	Variable	SRS is a short screener for suicidality; MAPS is a 2-hour computer-administered assessment of risk and protective factors
Imminent Danger Assessment	Clinical interview	20 – 30 minutes	Aids clinicians in determining the imminent danger of suicide
Schedule for Affective Disorders (K-SADS)	Clinical interview	2.5 – 3.0 hours	A semi-structured diagnostic clinical interview designed for use with youth that provides a systematic approach for evaluating suicidality
Diagnostic Interview Schedule for Children (DISC)	Clinical interview	1.5 – 2.0 hours	A structured diagnostic clinical interview that can be used to evaluate suicidality
Columbia-Suicide Severity Rating Scale (C-SSRS)	Self- report	Variable	A self-report questionnaire designed to assess severity of suicidal ideation
Suicide Assessment Five- Step Evaluation and Triage (SAFE-T)	Self- report	Variable	A self-report questionnaire designed to assess severity of suicidal ideation
Suicide Behaviors Questionnaire (SBQ-R)	Self- report	Variable	A self-report questionnaire that assesses suicide- related thoughts and behavior
Suicide Assessment Scale	Self- report	Variable	A self-report questionnaire to differentiate suicide attempters from non-attempters

Source: Goldston & Compton, 2007; Substance Abuse and Mental Health Services Administration, n.d.; Posner, et al., 2007.

Bradley and Rotheram-Borus developed the Imminent Danger Assessment, a clinical interview to assess a youth's imminent risk of suicide (Goldston & Compton, 2007). The interview consists of five tasks, each providing information about the youth's level of risk and ability to remain safe (Goldston & Compton). The tasks ask youth to:

- 1. Identify positive aspects about themselves or the future;
- 2. Use a feeling thermometer to identify emotions, particularly emotions that lead to suicidal thoughts or feelings;
- 3. Generate alternative coping strategies for situations that provoke suicidal feelings and thoughts;
- 4. Identify three supportive individuals from whom they could seek support if they feel that they cannot keep themselves safe; and
- 5. Agree to keep themselves safe and tell someone if they feel unable to keep themselves safe (Goldston & Compton).

The Imminent Danger Assessment provides the clinician with the following information about the youth:

- The youth's degree of hopelessness;
- The youth's ability to identify his or her emotions, which can enable youth to seek support prior to becoming suicidal;
- The youth's reason for saying that he or she is not suicidal (Is the youth truly no longer suicidal or is he or she attempting to avoid further discussion about state of mind or attempting to avoid hospitalization?);
- The youth's ability to identify his or her support system; and
- The youth's ability to cope with suicidal tendencies (Goldston & Compton, 2007).

The Schedule for Affective Disorders (K-SADS) and the Diagnostic Interview Schedule for Children (DISC) are both diagnostic clinical interviews with extensive sections assessing suicidality (Goldston & Compton, 2007). The K-SADS is a semi-structured clinical interview that prompts the clinician to ask about suicidal ideation, non-suicidal self-injurious behavior, history of suicide, and other related topics (Goldston & Compton). The DISC prompts the clinician to ask about the same topics in a more structured manner (Goldston & Compton).

Self-report questionnaires can be useful for adolescents who refuse to talk or have difficulty expressing their thoughts and feelings verbally. One such measure that is sensitive to changes in level of suicidality is the Suicide Assessment Scale. This measure includes factors that have been found to be associated with imminent suicide risk, such as poor frustration tolerance, lack of resourcefulness, sadness, hypersensitivity, and perceived loss of control. The scale has been shown to differentiate suicide attempters from non-attempters, to be predictive of future suicide, and to be sensitive to change in suicidal state (Posner et al., 2007).

It is well established that the hospital emergency department is a key venue in which to conduct youth suicide screening (Jancin, 2015). Ongoing research is evaluating the feasibility of utilizing an optimal screening tool designed to be used in hospital emergency departments. Routine screening for suicide risk in medical emergency departments would help solve a major challenge to preventing these deaths. Older male teens, who are at highest suicide risk, seldom seek mental health care. However, roughly one-third of adolescents visit the emergency department each year (Jancin).

#### Interventions

Currently there are no treatments that have been deemed evidence-based. Despite limitations in the literature, there is research to support the use of some techniques over others. The following paragraphs summarize the literature regarding treatment focus, crisis management, and ongoing treatment. A summary of interventions and treatments is included in Table 3.

## Promising Practices in Youth Suicide Prevention

In a review of the literature on treatments for suicide ideation, suicide attempts, and non-suicidal self-injurious behavior in both youth and adults, treatments that target suicidal behavior directly are shown to be effective (Miller, Rathus, & Linehan, 2007). There is little research to support the effectiveness (as measured by number of suicide attempts or lethality of attempts) of treatments focusing on depression, bipolar disorder, and other underlying disorders associated with suicide (Miller, Rathus, & Linehan). Spirito and Overholser note that, although it is important to treat the underlying psychopathology, such treatments do not necessarily reduce suicidal behavior (2003). In a related finding, a study examining the outcome of two treatments for suicidal females, the treatment that focused directly on suicidal behavior, Dialectical Behavior Therapy (DBT), outperformed the treatment for the control group (community treatment by an expert therapist) in reducing suicide attempts. The treatments, however, did not differ in their effect on depressive symptoms (Linehan et al., 2006).

The SOS Signs of Suicide Prevention Program is a universal, school-based education and screening program that teaches students to recognize warning signs of depression and suicidality in themselves or their peers and to seek help from a trusted adult (Substance Abuse and Mental Health Services Administration [SAMHSA], 2016). The SOS Program is designed for middle school (ages 11-13) or high school (ages 13-17) students. The screenings within the SOS Program are informational, not diagnostic (Holmberg, 2015). The goal of the screening is to identify students with symptoms consistent with depression and/or suicidality and to recommend a complete professional evaluation. The SOS Program is included on SAMSHA's National Registry of Evidence-based Programs and Practices as promising and is recommended for reducing suicidal thoughts and behavior. The review of the program yielded sufficient evidence of a favorable effect (SAMHSA).

Table 3
Summary of Interventions for Youth Suicide

What Works		
Currently no psychopharmacological trea	atments meet criteria for a treatment that works.	
Currently no psychological treatments m	eet criteria for a treatment that works.	
What Seems to Work		
Selective serotonin reuptake inhibitors (SSRIs)	These antidepressants may help reduce suicidal ideation; however, in some individuals they may cause suicidal ideation. Youth taking SSRIs must be closely monitored.	
Cognitive behavioral therapy (CBT) Dialectical behavior therapy (DBT)	These psychotherapies have both shown promise in reducing suicidal ideation in some youth when paired with appropriate medication therapy. Other psychotherapies, such as interpersonal therapy for adolescents, psychodynamic therapy and family therapy, may also be effective.	
SOS Signs of Suicide Prevention Program	A school-based education and screening program that teaches students to recognize warning signs of depression and suicidality in themselves or their peers.	
Not Adequately Tested		
Gatekeeper training	Involves educating youth, parents, and caregivers in warning signs of suicide to encourage early intervention.	
What Does Not Work		
Tricyclic antidepressants	Not recommended; effectiveness has not been demonstrated and older tricyclic antidepressants are lethal in overdose quantities.	
No-suicide contracts	Designed as an assessment tool, not a prevention tool. Studies on effectiveness in reducing suicide are inconclusive and the use is discouraged, as they may be interpreted as being coercive or may encourage suicide in some individuals.	

Cognitive behavioral therapy (CBT) has seen promising results in recent years. When paired with the appropriate pharmacological treatments, CBT can be effective in reducing suicidal ideation in youths experiencing negative symptoms (Hawton, Saunders, & O'Connor, 2012).

#### **Crisis Management**

Clinicians should be prepared to hospitalize suicide attempters who express a persistent wish to die or who exhibit symptoms of severe mental disorders. An inpatient stay will allow time for a complete medical and psychiatric evaluation with initiation of therapy in a controlled setting as well as arrangement of appropriate mental health follow-up care (Shain & Committee on Adolescence, 2016). Discharge should occur only after the following three issues have been addressed:

- 1. Making certain adequate supervision is available;
- 2. Ensuring that the level of suicidality has stabilized; and
- 3. Gaining assurance that the youth's environment will not contain any potentially lethal items, such as guns or medications, by having an explicit conversation with the youth and parent or caregiver about the importance of securing such items (Jacobs et al., 2010).

In addition, immediate treatment, follow-up, and closer monitoring will help the youth transition from the hospital to the home (Salvatore, 2012).

When working with youth at high risk for suicide (particularly during the period following a suicide attempt), therapists must be available 24-hours a day, or must arrange an on-call system or equivalent system. They also must repeatedly assess the youth's state of risk (Spirito & Overholser, 2003). Additionally, parents must be directed to increase the level of supervision provided to the youth.

## **Ongoing Treatment**

The American Foundation for Suicide Prevention (AFSP) states that psychotherapy, although not in itself an evidence-based practice, is an important component to the treatment of suicidality in youth (2014b). As noted previously, CBT has been found to be a promising treatment for suicide attempters. In addition, DBT has promise for youth with borderline personality disorder and recurrent suicidal ideation and behaviors (AFSP; Hawton, Saunders, & O'Connor, 2012). Moreover, interpersonal therapy for adolescents, psychodynamic therapy, and family therapy are all options when choosing a treatment modality (AFSP). However, as previously noted, research is sparse within this population.

#### **Pharmacological Treatment**

The U.S. Department of Health and Human Services (2001) has outlined pharmacological interventions thought to be effective in reducing suicide. However, it must be emphasized that youth prescribed any medications must be carefully monitored so that any change in the youth's behavior or any adverse side effects can be immediately reported. New interventions are being developed and tested for the treatment of disorders associated with suicidal behaviors. Since few studies of treatments for mental disorders have included youth with suicidal behaviors, treatments need to be assessed for their potential to reduce suicide. Furthermore, after the youth is thoroughly assessed for any mental disorders, the clinician must tailor the pharmacological interventions to any disorders that have been diagnosed.

## Antidepressants and the Risk of Suicidal Behavior

According to the AFSP, selective serotonin reuptake inhibitors (SSRIs) may be successful in reducing suicidal ideation and suicide attempts in non-depressed adults with certain personality disorders (2014b). However, it is necessary to closely monitor youth taking SSRIs, as there is some evidence that suggests that SSRIs can increase suicidality in youth and young adults under age 24 (Hammad, Laughren, & Racoosin, 2006). Given concerns about suicidality during antidepressant treatment, regular and systematic monitoring of suicidality, commencing with a pre-treatment baseline, is recommended instead of relying on spontaneous reports from the patient (Posner, et al., 2007). This may assist in tracking treatment progress and in determining whether any suicidality experienced during treatment is treatment- or disease-specific, thus enabling a better understanding of suicidal state and risk. A more detailed

discussion of the use of antidepressants in treating children and adolescents is included in the "Antidepressants and the Risk of Suicidal Behavior" section of the *Collection*.

## Not Adequately Tested

Gatekeeper training involves educating youth, parents, and caregivers in the preliminary warning signs of suicide (Hawton, Saunders, & O'Connor, 2012). Reports from these individuals serves as a frontline defense poised to catch early warning signs and to get affected individuals treatment at earlier stages. By offering this education to many people, it is more likely that early suicidal tendencies will be noticed (Hawton, Saunders, & O'Connor). The available data on the effectiveness of such training is promising, but it is limited in scope and external validity.

#### What Does Not Work

No-suicide contracts were explicitly designed to be used for assessment purposes in much the same way as they are used in the *Imminent Danger Assessment* discussed under Assessment section of this chapter (Goldston & Compton, 2007). Due in part to the complications and ethical concerns of conducting research on suicidal patients, the literature on the effectiveness of these contracts is inconclusive (McMyler & Pryjmachuk, 2008). Moreover, study results were varied, with some suggesting that using the contract reduces suicidal behavior and others suggesting that they increase suicidal behavior (McMyler & Pryjmachuk). Goldston and Compton discourage using no-suicide contracts and instead encourage developing a collaborative safety plan with their patients that identifies steps the patient can take during times of high suicidal risk but avoids agreements that could be perceived as coercive.

Tricyclic antidepressants are not recommended for use with suicidal youth, as their effectiveness has not been demonstrated and the possible side effects may outweigh the possible positive outcomes (Wijlaars, et al., 2013). Older-generation tricyclic antidepressants are lethal in overdose quantities and should be avoided in favor of newer generation agents (McCain, 2009).

## **Overview for Families**

Most teenagers experience stress while growing up. Stressors can include societal pressures to adhere to cultural norms, pressure to succeed, divorce within a family, and financial difficulty. Youth may view suicide as the answer to these stressors if proper treatment is not rendered in time. Families and friends should be aware of the warning signs of suicide and should seek help immediately if they believe a family member or friend is contemplating suicide (AACAP, 2013). The following are risk factors that may increase the likelihood of a suicide attempt:

- Being male, especially over age 16
- Past suicide attempts, especially with methods other than ingestion or superficial cutting
- Mood or conduct disorder
- Substance use, especially among males
- Aggression or fighting
- Living alone or in a violent community
- Currently depressed, manic, hypomanic, and/or severely anxious
- Irritable, agitated, delusional, or hallucinating (AACAP, 2013)

Suicide is the second leading cause of death in youth worldwide. Youth suicide is a growing problem, but proper education, training, and services may help curtail the number of suicides. The biggest challenge affecting treatment is access to high quality care. Early intervention seems to be the greatest determinant of successful treatment. Parents, family members, and friends should be diligent in watching for suicide risk factors and ensuring affected youth receive the treatment they need (AACAP, 2013; Hawton, Saunders, & O'Connor, 2012).

### **National Crisis Hotlines**

#### **The National Suicide Prevention Lifeline**

1-800-273-Talk (8255) TTY: 1-800-799-4889

Veterans: Press 1 Spanish: Press 2

#### **Military One Source**

(24 Hour Resource for Military Members, Spouses and Families) 1-800-342-9647

#### **LGBT Youth Suicide Hotline**

**Trevor Project** 

1-866-488-7386

## **Virginia Crisis Centers and Hotlines**

Information provided by Virginia Department of Health Suicide and Youth Violence Prevention Program and local providers.

## **ACTS Helpline**

Serving Dumfries, Manassas City and Manassas Park

Hotline: 703-368-4141 1-800-273-TALK (8255)

https://www.actspwc.org/

#### **Concern Hotline**

Clarke Hotline: 540-667-0145 Frederick Hotline: 540-667-0145 Page Hotline: 540-743-3733

Shenandoah Hotline: 540-459-4742 Warren Hotline: 540-635-4357 Winchester Hotline: 540-667-0145

#### The Crisis Center

Bristol Hotline: 800-273-8255 http://www.crisiscenterinc.org/

#### Crisis Line of Central Virginia

Lynchburg Crisis Line: 800-947-HELP

(4357); 888-947-9747

#### CrisisLine of Norfolk

Norfolk Crisisline 24 Hours / 7 Days:

757-622-1126

#### CrisisLink

Arlington and the Washington Metropolitan area

Hotline: 703-527-4077

#### Madison House - Charlottesville

Hotline: 804-295-8255

http://www.madisonhouse.org/

#### The Raft Crisis Hotline

Blacksburg Emergency & Assessment

Crisisline 24 Hours / 7 Days:

540-961-8400

http://www.nrvcs.org/

## West End Behavioral Healthcare

Richmond City Hotline: 804 819-4100 Martinsville-Henry County 24 Hours /

7 Days: 540-632-7295

Franklin County: 540-489-5490 Patrick County: 540-694-2962

Teenline: 540-634-5005

#### **Resources and Organizations**

#### **American Association of Suicidology**

1-800-273-TALK (8255)

http://www.suicidology.org/

#### **American Foundation for Suicide Prevention**

https://www.afsp.org/

#### Children's Safety Network

http://www.childrenssafetynetwork.org

#### Jason Foundation, Inc.

http://jasonfoundation.com/

## **National Alliance for the Mentally Ill (NAMI)**

http://www.nami.org

## **National Center for Injury Prevention and Control**

Suicide Prevention Activities

800-CDC-INFO (232-4636)

http://www.cdc.gov/violenceprevention/suic ide/index.html

#### **National Institute of Mental Health**

https://www.nimh.nih.gov/index.shtml

## National Organization for People of Color Against Suicide (NOPCAS)

http://nopcas.org/

### **National Strategy for Suicide Prevention**

http://actionallianceforsuicideprevention.org

#### **National Suicide Prevention Lifeline**

(Toll-Free 24 hours/7 days a week)

800-273-8255

TTY: 1-800-799-4889

http://suicidepreventionlifeline.org

#### Society for the Prevention of Teen Suicide

http://www.sptsusa.org/

# Suicide Awareness/Voices of Education (SA/VE)

http://www.save.org

#### **Suicide Prevention Resource Center (SPRC)**

http://www.sprc.org

# **Substance Abuse and Mental Health Services** (SAMHSA)

http://www.samhsa.gov

## Virginia Department of Health

Division of Injury and Violence Prevention

P.O. Box 2448

109 Governor Street

Richmond, VA 23219

804-864-7736

Virginia Suicide Prevention Resource Directory 2016 Edition

http://www.vdh.virginia.gov/livewell/programs/suicide/documents/2016SuicidePreventionResourceDirectory4thEdFINAL.pdf

#### Youth Suicide Prevention Program (YSPP)

http://www.yspp.org

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#### DISCLOSURE STATEMENT

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