

# **Best Practices in Children's Mental Health**

A Series of Reports Summarizing the Empirical Research and other Pertinent Literature  
on Selected Topics

## **Report # 21**

### **Suicide Prevention for Children and Youth**

*A Review of the National Literature*  
**January, 2008**

**Produced by the University of Kansas**  
School of Social Welfare  
Twente Hall  
Lawrence, Kansas  
In conjunction with  
Kansas Social and Rehabilitation Services

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## Suicide Prevention for Children and Youth — Review of the Literature

### EXECUTIVE SUMMARY

Each year, about 1,600 youth in the U.S. die by their own hands making suicide the third leading cause of death for children and adolescents. Incidence rates are higher for teenagers than for younger children. In addition, estimates indicate that each year 5% to 8% of adolescents in the U.S., or between 1 and 2 million young people, attempt suicide.

As youth enter into their late teens, risk for suicide rises and continues to rise until young people reach their early twenties. Suicide attempts are highest for young people between the ages of 16 and 18 years. There are notable gender differences. Generally *suicidal ideation and attempts* are more common among female teens, but males far outnumber females in *completing suicides*. Four times more boys than girls between 15 and 19 years commit suicide. The preferred means for suicide, especially for older youth, are firearms followed by suffocation (mostly hanging), and poisoning.

Native Americans/Alaska Natives have by far the highest suicide rate of any ethnic group in the U.S., a phenomenon that has been attributed to low social integration, access to firearms, alcohol or drug use, as well as frequent experiences of discrimination. Aside from first nations youth, suicide is most common among Caucasians. However, African-American youth, and female youth in particular, recently show the steepest increase of suicides. Notably, increased suicide rates in the African-American population have occurred predominantly for youth in higher socio-economic groups. There is also some evidence that Asian and Hispanic girls may be at increased risk. Overall, much more attention and research is required to understand the interaction of suicidality and cultural diversity across and within minority populations.

**Risk and Protective Factors** include categories such as personal characteristics, family characteristics, and life circumstances. While knowledge of these factors is essential, professionals should keep in mind that an individual's suicidality remains very difficult to predict. Known risk factors are:

- Psychopathology (especially depression, and substance abuse)
- Previous suicide attempts
- Cognitive factors (including hopelessness, impulsivity, poor problem-solving skills, and aggression).
- Lesbian, Gay, or Bisexual orientation
- Family history of suicidality
- Parental psychopathology
- Chronic parent–child conflict
- Stressful life events (relationship breakup, acute parent–child conflict, death).

- Physical and sexual abuse
- Low socioeconomic status
- Academic/disciplinary problems in school
- Contagion/imitation (exposure to peer suicide /media reports)
- Access to firearms
- Youth on antidepressants (especially SSRIs) seem significantly more likely to attempt suicide; thus use of these medications require close monitoring as to increased suicidality.

Known protective factors are:

- Optimistic/positive disposition
- Good coping and problem-solving skills
- Religiosity
- Good family functioning
- Family cohesion (mutual involvement, shared interests, and emotional support)
- Good child-parent relations
- Parental involvement in child's life
- Friends (increasingly important with age)
- Contact with caring adults
- Sense of connection with school, and involvement in community (LGB supports for gay/lesbian/bisexual youth)
- School safety (especially for LGB youth)

### **Prevention Strategies and their Effectiveness**

Considerable efforts have been made to address and reduce suicidality in youth. Though plagued with difficulties how to measure effectiveness, a variety of strategies have emerged and are typically combined in some fashion in outpatient clinical settings, in school-based programs, and in efforts designed for emergency rooms. Best practices in the prevention of youth suicide make use of a multi-modal approach that includes efforts on every prevention level including intervention and postvention. The following strategies provide a basis for prevention programming but still await research and adaptation to make them more appropriate and effective for ethnic and gender diversity:

A) ***Suicide awareness and education programs*** typically aim to increase knowledge and improve attitudes about youth suicide, and more or less target help-seeking behaviors. In schools, such efforts are often implemented as curriculum-based programs which have shown limited effectiveness. Some programs demonstrate effects on knowledge and attitudes, such as changing the assumption that suicidality is a “normal” reaction to stress to understanding that suicide is most often connected to a treatable mental disorder such as depression. However, there is insufficient evidence that such changes in attitudes are resulting in behavioral changes. **Contraindicated** are curriculum programs that fail to emphasize the role of mental illness, one-time assemblies without follow-up, and

programs that use graphic material, detailed descriptions, or testimonials because these elements could inadvertently exacerbate suicidality in at-risk youth.

- B) *Gatekeeper training*** for professional staff in schools, ERs, and outpatient treatment agencies is a frequent component of program initiatives but rarely assessed separately. Trainings are often brief and have shown to improve knowledge and attitudes for short-term periods. They require further empirical testing and their effectiveness would likely improve with longer term, or periodic booster trainings.
- C) *Screenings*** are promising tools for identifying at-risk youth otherwise overlooked but can be challenging to implement and require availability of other service components. While well designed screenings do not show iatrogenic effects, research shows that successfully identifying at-risk youth requires using a combination of multiple, complementary assessment methods (i.e. self-assessment questionnaires and clinical interviews). Most importantly, screenings are only useful if they are embedded in resources for timely and appropriate follow-up. Thus to implement school-wide screenings, educators and administrators must be involved in planning and implementation. Inherent dilemmas in screenings are the balance of over- vs. underidentifying at-risk youth, and the changing nature of youths' mental status over time which raises the question in which intervals screenings are best repeated.
- D) *Hotlines*** can have a positive short-term impact on suicidal callers and the vast majority of youth are aware of the existence of hotlines. However, youth rarely access this source of assistance and especially youth with the highest needs hold more negative attitudes toward the use of hotlines than of other sources of help. The internet may be a more easily utilized source of help and its potential should be explored by professionals.
- E) *Means restriction***, such as restricting access to firearms (or other lethal means) is an *essential* component of suicide prevention for anyone dealing with depressed or suicidal youth. More general efforts to restrict access to firearms and increase safe storage of guns as a public health measure have shown some effects on the rates of suicide. Especially, practices such as keeping a gun locked and unloaded, and storing ammunition in a separate and locked location are each associated with a protective effect in homes where guns are present. Other effective public health measures include smaller package sizes for potentially toxic substances, and safety barriers for high structures.
- F) *Media education*** is a prevention method mainly aiming to reduce the contagion effect associated with too detailed or graphic reporting on suicides or suicide attempts. Guidelines for those interacting with the media and for professionals in media have been

issued (See Appendix B.). There is evidence that reporting practices have changed following the release of the new media guidelines.

**G) *Pharmacological treatment*** is a frequent, and frequently contested, ingredient of efforts to assist youth with psychiatric difficulties. Antidepressants, mood stabilizers, and antipsychotic (neuroleptic) medication have shown to be effective in reducing suicidality. However, findings and recommendations about the use of SSRIs in particular are still conflicting and thus confusing to practitioners and parents alike. Youth on antidepressants seem significantly more likely to attempt suicide (researchers found an increased risk of 1.52 times). Therefore, though some studies indicate the usefulness of fluoxetine (Brand name “Prozac”) especially in combination with cognitive behavioral therapy, children and youth on SSRIs must be closely monitored as to potential increases in suicidality.

**H) *Cognitive-behavioral treatment and skills training*** are well established ingredients of prevention efforts and are probably efficacious. Treatment focuses on monitoring and modifying thoughts, assumptions, and beliefs, building problem-solving skills, as well as communication, affect regulation, and social skills. Short-term CBT that integrates problem solving as a core intervention has shown to reduce suicidal ideation, depression, and hopelessness for periods of up to one year (though not necessarily beyond that). Longer term treatment is needed to decrease suicide attempts. CBT plus fluoxetine seems more effective than CBT or fluoxetine alone, and fluoxetine alone is superior to CBT alone. For youth with a Borderline Personality diagnosis, Linehan’s Dialectical Behavior Therapy (DBT) model has shown particular effectiveness. **Counterindicated** for suicidal youth are nondirective supportive therapy models.

***Specific School-Based Programs*** currently ***deemed evidence-based*** by Registry of Evidence-Based Suicide Prevention Programs ([www.sprc.org/featured\\_resources/bpr/ebpp.asp](http://www.sprc.org/featured_resources/bpr/ebpp.asp)) are:

- Signs of Suicide (SOS, see Aseltine et al. 2003,2004, 2007)
- Reconnecting Youth (see Thompson et al., 2000)
- Lifelines
- American Indian Life Skills Development/ Zuni Life Skills Intervention (see LaFromboise, 1995)
- C-Care /CAST (Counselors Care/Coping and Support Training; Randell, Eggert, & Pike, 2001 )
- The Columbia University TeenScreen

***Specific ER-based Programs*** currently ***deemed evidence-based*** are

- Specialized Emergency Room Intervention for Suicidal Adolescent Females
- ER Means Restriction Education for Parents (see Rotheram-Borus, 2000)

## Introduction

Prevention of deliberate self-harm in young people, especially suicide, has been part of various policy initiatives such as the *President's Freedom Commission on Mental Health*, *The Surgeon General's Call to Action to Prevent Suicide* (U.S. Public Health Service, 1999), and the *National Strategy for Suicide Prevention* (DHHS, 2001) the latter of which delineated eleven goals and objectives, namely:

1. Promote awareness that suicide is a public health problem that is preventable;
2. Develop broad-based support for suicide prevention;
3. Develop and implement strategies to reduce the stigma associated with being a consumer of mental health, substance abuse and suicide prevention services;
4. Develop and implement community-based suicide prevention programs;
5. Promote efforts to reduce access to lethal means and methods of self-harm;
6. Implement training for recognition of at-risk behavior and delivery of effective treatment;
7. Develop and promote effective clinical and professional practices;
8. Increase access to and community linkages with mental health and substance abuse services;
9. Improve reporting and portrayals of suicidal behavior, mental illness and substance abuse in the entertainment and news media;
10. Promote and support research on suicide and suicide prevention;
11. Improve and expand surveillance systems.

The following report presents a summary of current literature on the topic of suicide prevention for children and adolescents based on a review of national literature published between 1997 and 2007 (based on databases of Social Work Abstracts, PubMed, ERIC, and PsycInfo). It includes state of the art knowledge on risk and protective factors, empirical support for specific prevention strategies and programs, as well as information gleaned from studies which represent insights from consumers, families, and professionals in the field.

## Definitions and Epidemiology

**Suicide** is a completed act of deliberately killing oneself. "More teenagers and young adults die from suicide than from cancer, heart disease, AIDS, birth defects, stroke, pneumonia and influenza, and chronic lung disease, COMBINED" (DHHS, 2001, p. 113, emphasis in original). Each year, about 1,600 youth in the U.S. die by suicide (Gould, Greenberg, Velting, & Shaffer, 2003). According to the National Institute of Mental Health (NIMH), in 2004, suicide was the third leading cause of death for children and adolescents,

with older youth (teenagers and young adults) showing higher incidence rates than younger children:

- 1.3 of each 100,000 children ages 10 to 14 died of suicide; as did
- 8.2 of 100,000 adolescents ages 15 to 19, and
- 12.5 per 100,000 young adults ages 20 to 24.

*Suicide attempts* are “non-fatal, self-inflicted destructive acts with explicit or inferred intent to die” (Bridge, Goldstein, & Brent, 2006, p. 372). There is no official count for attempted suicides nationwide (Moskos, et al., 2004) but estimates indicate that each year, between 5% and 8% of adolescents in the U.S., or between 1 and 2 million young people, attempt suicide; and almost 700,000 of them receive medical attention for their attempt (Gould et al., 2003; Shaffer & Pfeffer, 2001). Many suicide attempters never spoke to family members about their distress (O’Donnell et al. 2003). Although much less common than suicidal ideation, suicide attempts are often the presenting complaint for youth referred to mental health professionals (Shaffer & Pfeffer, 2001).

*Suicidal behavior* denotes voluntary self-injurious acts that are intended or risking serious harm or death. *Deliberate self harm* is a broader term subsuming suicide attempts as well as those behaviors that are self-injurious but may or may not include the intent to kill oneself including so called “para-suicidal behaviors” (Fortune & Hawton, 2005).

*Suicidal ideation* refers to thoughts of harming or killing oneself (Bridge et al., 2006). According to the Youth Risk Behavior Survey (YRBS) (Grunbaum et al., 2002), a representative study by the Centers for Disease Control and Prevention (CDC), 19% of high school students report having “seriously considered attempting suicide,” and almost 15% had a specific plan (Gould et al., 2003). Suicidal thoughts per se are quite common in children and adolescents of both genders and are not necessarily a sign of a psychological disorder or risk for acting upon the ideas. Therefore, professionals need to be aware of risk and protective factors that help distinguish youth at higher risk for acting on suicidal ideation. (For details see “Risk and Protective Factors” below.)

## **Current Trends**

Looking at data since the 1960s, youth suicide has overall increased. Although numbers declined between 1990 and 2003, the most recent trend has been going upward again. The latest available data, 2003 to 2004, shows the largest single-year increase with a

rate increase of 8.0% for youth and young adults aged 10-24 years (CDC, 2007). Although this increase could be a one-time anomaly, the finding has received media attention and has sparked discussion (for instance at the online discussion forum of Portland University's Research and Training Center for Children's Mental Health, <http://www.rtc.pdx.edu/FeaturedDiscussions/pgFD00main.php>). Since recent increases seem to correlate to fewer prescriptions of SSRIs for youth, some authors have wondered if there is a connection (McKeown, Cuffe, & Schultz, 2006). Still, for reasons unknown, the steepest increase of suicides is occurring in groups that thus far had shown much lower numbers, namely younger children, girls, and African-American youth.

### **Means and Methods of Youth Suicide**

For the years 2001 to 2004, the most common method of suicide among youth (ages 10-19) was the use of firearms (49%), followed by suffocation (mostly hanging) (38%), and poisoning (7%) (CDC, 2004). Prior to 2001, firearms were even more prominent as the main mean. In a study of 63,954 (n) suicides among youth aged 14 through 20 years during the 1976-2001, 62% of suicides were committed with firearms (Webster, Vernick, Zeoli, & Manganello, 2004). In recent trends, methods differed by age. Among younger children (10-14) firearms were surpassed by suffocation as the main method, while for older youth (15-19) firearms remain the preferred mean (CDC, 2004).

### **Age**

Attempted and completed suicide is generally rare among young children or in early adolescents. However, the incidence rate increases markedly for youth in their late teens, and continues to rise until young people reach their early twenties. Suicide attempts are highest for young people between the ages of 16 and 18 years (Gould et al., 2003). However, for 10 to 14-year-olds, suicide numbers increased 120% from 1980 to 1998 (Kalafat, 2003), an increase that, according to Kalafat (2003), seems to follow trends for substance abuse.

### **Gender**

There are notable gender differences in suicide and suicidal behaviors among young people. Generally *suicidal ideation and attempts* are more common among female teens, but males far outnumber females in *completing suicides*. Four times more boys than girls between 15 and 19 years commit suicide, -- a difference that increases to more than six times for young men ages 20-24 (NIMH, [www.nimh.nih.gov](http://www.nimh.nih.gov)). Completed suicide is often associated with factors more common in males such as more aggressive behaviors and use of

more lethal means, most importantly firearms, as well as with comorbid substance abuse problems (Gould et al., 2003). Women tend to favor less aggressive methods, such as suffocation/hanging, or overdoses, which are still dangerous but less likely to be lethal in societies like the U.S. where emergency medical services are readily available (CDC, 2007; Gould et al., 2003).

According to CDC data, the recent increase in suicide rates (2003 to 2004) is much more pronounced for girls. While rates for boys aged 10-14 remained stable, the suicide rate for girls aged 10-14 rose by 75.9% (from 56 to 94 deaths). Rates for 15-19 year-old boys rose 9% (from 1,222 to 1,345) while the rate for females in the same age group increased 32.3% (from 265 to 355 deaths).

### **Ethnicity**

More than double that of European Americans or the national average, Native Americans/Alaska Natives, especially those living on reservations, have by far the highest suicide rate of any ethnicity in the U.S. (Strickland, Walsh & Cooper, 2006). This phenomenon has been attributed to low social integration, access to firearms, alcohol or drug use, as well as frequent experiences of discrimination (Gould et al., 2003; Macgowan, 2004; Yoder et al., 2006). The impact of culture and ethnicity has not been well researched but in a study of culturally distinct tribes, Native youths exhibited different patterns for their reasons of being suicidal. These reasons were distinctly suited to their respective cultural patterns (Novins, Beals, Roberts, & Manson, 1999). At the same time, Native tribal members living in urban areas appear to have different patterns of suicide (Freedenthal & Stiffman, 2004) pointing to the importance of considering differences of social contexts among tribal members.

Aside from First Nations youth, suicide is most common among Caucasians (Gould et al., 2003). However, African-American youth, and female youth in particular, recently show the steepest increase in suicides (CDC, 2007). Notably, increased suicide rates in the African-American population have occurred predominantly for youth in higher socio-economic groups (Moskos & Behrendt, 2004). One study also indicated higher risk for Asian girls (Bae, Ye, Chen, Rivers, & Singh, 2005). While studies diverge on the question if Latino/Latina populations are overrepresented among *completed* suicides (Gould et al., 2003), Hispanic youth, especially those in special education, are considered at higher risk (Duarte & Bernal, 2007; Medina & Luna, 2006). Particularly, Hispanic girls seem at increased risk. A study which compared self reported suicide attempts in Hispanic, African American and Caucasian youth (Rew, Thomas, Horner, Resnick, & Beuhring, 2001) found that Latina youth had the

highest rate of attempted suicide. Research on Latino/a adolescent suicide behavior is very limited but it is known that they have less access to mental health services and are less likely to receive necessary care (Kataoka, Stein, Lieberman, & Wong, 2003). Overall, much more attention and research is required to understand the interaction of suicidality and cultural diversity across and within minority populations (Duarte & Bernal, 2007; Gary, Baker & Grandbois, 2005).

### **Risk and Protective Factors**

Suicidality in youth is considered as resulting from a complex, and interactive process among multiple factors, some of which may pose risks while others serve as protective factors (Bridge, Goldstein, & Brent, 2006; Pfeffer, 2001). A number of studies have illuminated factors associated with higher risk and, to a lesser extent, with protective factors, that can inform professionals as to the areas most important to attend to in prevention, assessment, and treatment (Fortune & Hawton, 2005). Nonetheless, it should be noted that predicting who may or may not attempt or commit suicide remains a highly difficult enterprise. As Shaffer and Pfeffer (2001) warn, “One cannot gauge future suicidal behavior” (p.25S) because the predictive value of risk and protective factors is not yet well established and is far more complex than adding or subtracting such factors.

#### ***Risk factors***

- ***Prior suicide attempts***

Prior suicide attempts are among the few strong predictors for completed suicide particularly for boys (30 times higher) and to a much lesser extent for girls (3 times increase) (Gould et al., 2003). Therefore, prior attempts are always considered a risk factor. Still, the majority of teens who complete suicide *never* made a prior attempt (Moskos, et al., 2004) and, conversely, many adolescents who make a serious attempt will never try again (Shaffer & Pfeffer, 2001).

- ***Psychiatric disorders and substance abuse***

The strongest risk factor associated with suicide is the presence of a psychiatric disorder, especially if combined with substance abuse (Fortune & Hawton, 2005). Substance abuse is associated with increased suicidal ideation but even more often with actually attempting suicide (Gould et al., 2003). A study by Manetta and Ormand (2005) found that alcohol and inhalants had particularly strong connections to suicidal behaviors.

Ninety percent of youth who commit suicide have at least one major psychiatric disorder, and often for a prolonged period of time (over two years) (Shaffer & Pfeffer, 2001). Most often suicidal youth suffer from a mood disorder, typically depression and/or anxiety disorder (Foley, Goldston, Costello, & Angold, 2006). Bipolar disorder has also been associated with elevated risk for suicide (Miklowitz, & Taylor, 2006). Affective disorders are more common among female victims, and panic attacks increase risk for suicidal ideation or suicide attempts in girls (Fortune & Hawton, 2005; Shaffer & Pfeffer, 2001). Especially for boys, aggressiveness and disruptive disorders increase the risk (Fleischmann, Bertolote, Belfer, & Beautrais, 2005; Shaffer & Pfeffer, 2001; Renaud et al., 1999). Delinquent youth, particularly girls, show significantly higher suicidal behaviors even if controlling for other risk factors such as depression etc. (Thompson, Ho, & Kingree, 2007).

Associated cognitive and behavioral features include, impulsivity, poor problem-solving skills, hostility and aggression, negative self-concept/poor self-esteem, isolation, fewer social activities, and hopelessness (Fortune & Hawton, 2005; Gould, et al., 2003; Mazza & Eggert, 2001; Pfeffer, 2002; Rutter & Behrendt, 2004).

- ***Family risk factors***

Family risk factors include low family functioning and cohesion, family history of suicide and psychopathology, or experiences of family violence (Gould et al., 2003; Rew, et al., 2001). In their review of the literature, Fortune and Hawton (2005) note a strong association between suicide attempts and both childhood sexual abuse and physical abuse. Parental depression, especially depression in mothers, and lower levels of perceived attachment have also been associated with depression and higher suicidal ideation in adolescents (Essau, 2004). Girls seem particularly affected by poor parent-child relationships. These factors lead often to disengagement, avoidance, withdrawal, impulsivity, or risk taking behaviors (Fortune & Hawton, 2005)

- ***Social and life stressors***

Social and life stressors such as difficult relationships or isolation increase the risk of suicide (Fortune & Hawton, 2005; Gould et al., 2003; Stoelb & Chiriboga, 1998). Among such stressors could be chronic health conditions, such as asthma (Goodwin, & Marusic, 2004) as well as recent stressful events that overwhelm the young person's coping abilities and tend to precede suicides (Shaffer & Pfeffer, 2001; Huff, 1999). Such events include break-ups in romantic relationships, difficulties in the family, academic or discipline trouble in school, or delinquency (Thompson, Ho & Kingree, 2007).

Academic difficulties, like poor reading ability, have recently been identified as being correlated to elevated suicide risk even if controlling for sociodemographic factors and psychiatric disorders (Daniel et al., 2006). Also, exposure to the suicide of a peer or family member, other traumatic grief reactions (Melhem et al., 2004; Rew et al., 2001), as well as being victimized (Cleary, 2000), and homosexuality have emerged as contributing to suicide risk (Fortune & Hawton, 2005).

Although a majority of youth with same-gender *sexual orientation* do not report suicidality, studies still found a significantly increased risk (by 20-40%) for this population (Eisenberg, & Resnick, 2006; Kitts, 2005). Mediated by the presence of other known risk factors, such as depression and hopelessness, gay, lesbian and bisexual youth face additional psychosocial stressors, such as fears or experiences of stigmatization, discrimination, being ostracized, harassed or otherwise mistreated (Eisenberg, & Resnick, 2006; Kitts, 2005; Safren, & Heimberg, 1999).

- ***Access to firearms***

Access to firearms is considered a major risk factor particularly because of their lethality (Christoffel, 1998; Gould et al., 2003) and their presence in U.S. society. Since 1980, firearm-related suicides have accounted for 81% of the increase among youth age 15 to 19 years (Kalafat, 2003).

- ***Special Caution: antidepressants for youth***

A matched case-control study of Medicaid recipients who committed or attempted suicide while being treated with antidepressant medications found that, in contrast to adults, children and adolescents on antidepressants were significantly more likely to attempt suicide (an increased risk of 1.52 times) and more likely to complete suicide than matched controls (Olfson, Marcus, & Shaffer, 2006). These findings confirm previous warnings issued by the FDA and underscore the need to caution clinicians to provide careful monitoring of depressed youth treated with antidepressants.

**Highest Risk Factors for Suicide in Adolescents**

- Males at much higher risk than females
  - Among males
    - Previous suicide attempts
    - Age 16 or older
    - Associated mood disorder
    - Associated substance abuse
  - Among females
    - Previous suicide attempts
    - Mood disorders
- Immediate risk predicted by agitation and major depressive disorder
- Access to firearms (Shaffer & Pfeffer, 2001; Gould et al., 2003)

**Protective factors**

By comparison, there has been little research on protective factors (Fortune & Hawton, 2005). Still, factors known to serve as protection from suicidality include (Flouri & Buchanan, 2002; Gould et al., 2003; Kalafat, 2003; Lubell & Vetter, 2006; Rew et al., 2001):

- personal characteristics such as positive disposition;
- good coping and problem-solving abilities;
- contact with caring adults;
- good child-parent relations;
- higher parental involvement in youth’s life;
- good family functioning and cohesion;
- a sense of connection with school, family and community through opportunities to participate and make contributions;
- religiosity.

For *lesbian, gay, and bisexual* youth, studies (Eisenberg & Resnick, 2006; Fenaughty & Harre, 2003) identified the following significant protective factors against suicidal ideation and attempts:

- family connectedness,
- adult caring,
- school safety
- and connectedness to LGB supports

**Table 1 . Risk and Protective Factors in Youth Suicide** (based on Singer, 2006, p.242)

Risk factors	Protective factors
<b>Personal Characteristics</b>	
<ul style="list-style-type: none"> <li>• Psychopathology (especially depression, substance abuse)</li> <li>• Previous suicide attempts</li> <li>• Cognitive factors (including hopelessness, impulsivity, poor problem-solving skills, aggression).</li> <li>• LGB sexual orientation</li> </ul>	<ul style="list-style-type: none"> <li>• Optimistic/positive disposition</li> <li>• Good coping and problem-solving skills</li> <li>• Religiosity</li> </ul>
<b>Family Characteristics</b>	
<ul style="list-style-type: none"> <li>• Family history of suicidality</li> <li>• Parental psychopathology</li> <li>• Chronic parent–child conflict</li> </ul>	<ul style="list-style-type: none"> <li>• Good family functioning</li> <li>• Family cohesion (mutual involvement, shared interests, and emotional support)</li> <li>• Good child-parent relations</li> <li>• Parental involvement in child’s life</li> </ul>
<b>Life Circumstances</b>	
<ul style="list-style-type: none"> <li>• Stressful life events (relationship breakup, acute parent–child conflict, death).</li> <li>• Physical and sexual abuse</li> <li>• Low socioeconomic status</li> <li>• Academic/disciplinary problems in school</li> <li>• Contagion/imitation (exposure to peer suicide /media reports)</li> <li>• Access to firearms</li> </ul>	<ul style="list-style-type: none"> <li>• Friends (with age increasingly important)</li> <li>• Contact with caring adults</li> <li>• Sense of connection with school, and community (involvement) (LGB supports for gay/lesbian/bisexual youth)</li> <li>• School safety (especially for gay/lesbian/bisexual youth)</li> </ul>

## **Suicide Prevention and Intervention**

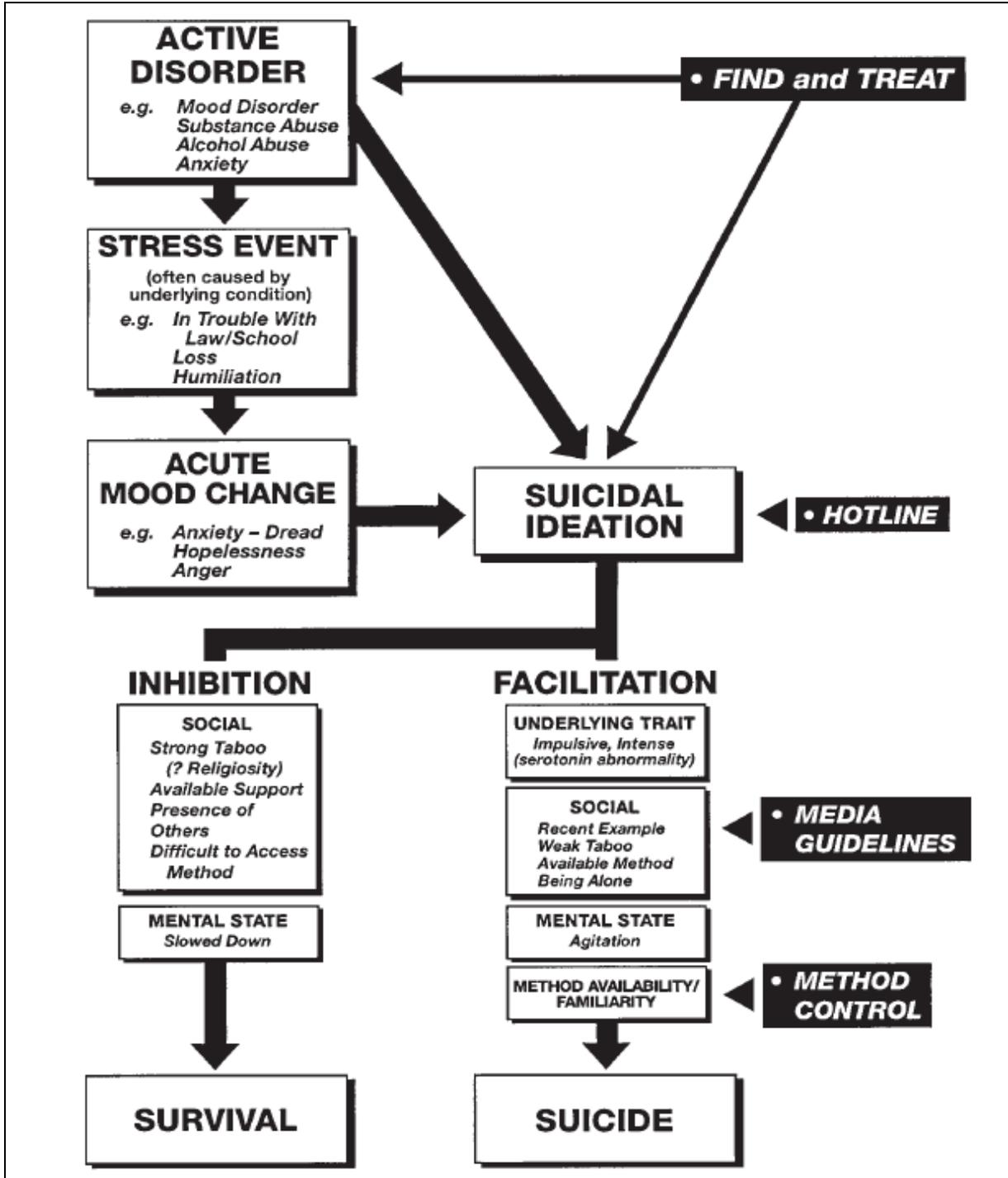
The overall empirical evidence about effective ways to prevent or treat suicidality in youth is quite low (Rodgers, Sudak, Silverman, & Litts, 2007). In part, this is due to the lack of specificity of risk factors that are predictive for suicidality combined with the overall low incidence rate of suicide, which together make traditional effectiveness studies highly unfeasible because they would require very high numbers of participants in the sample to yield any statistically powerful information (Goldney, 2005). Subsequently, research must depend on identifying and measuring “proxy” outcomes beyond suicide and attempted suicide, such as depression, hopelessness, suicidal ideation, and other outcomes that have emerged as risk and/or protective factors (Rodgers, Sudak, Silverman, & Litts, 2007). Because of the evidence about commonalities in risk factors for suicidal and homicidal/violent tendencies in youth, several authors argue for an integrated understanding of and approach to suicide and violence prevention (Browne, Barber, Stone, & Meyer, 2005; Harter, Low, & Whitesell, 2003; Lubell, & Vetter, 2006; Speaker, & Petersen, 2000).

Suicide prevention and intervention can include efforts for all youth (universal programs), programs for those deemed at risk (indicated programs), and so called “postvention,” i.e. efforts to ameliorate the traumatic effects of a suicide on families, peers, or communities (Leenaars, et al., 2001). Strategies and programs are typically implemented in one of three systems: communities, schools, or health care systems. Another system that serves youth who are potentially at high suicide risk is the Juvenile Justice System. A large proportion of youth who complete suicide have had contacts to the JJ system at the same time as less than half of youth the in JJ system are also in involved in public schools (Moskos, Achilles, & Gray, 2004). Authors therefore argue for integrated prevention efforts, including screening and treatment for youth in the juvenile justice system (Moskos, Achilles, & Gray, 2004).

Prevention efforts generally involve one or more of the following strategies (Shaffer & Pfeffer, 2001):

- Suicide awareness and education
- Gatekeeper training
- Screening
- Hotlines
- Means restriction
- Media education
- Pharmacological treatment
- Cognitive-behavioral treatment/ skills training

Shaffer and Pfeffer (2001, p. 34S) present the following overview to illustrate the various options for intervention:



## **Outcome Research on Prevention and Intervention Strategies**

### **Evidence Based Practices Project**

Current efforts to establish more solid empirical evidence for suicide prevention include the Evidence Based Practices Project (EBPP), a national initiative to develop a national registry of effective prevention programs (Rodgers et al., 2007). Funded by the Substance Abuse and Mental Health Services Administration (SAMSHA), the EBPP is a collaboration between the Suicide Prevention Resource Center (SPRC) and the American Foundation for Suicide Prevention (AFSP). It was initiated in 2005 to (1) support rigorous evaluations, (2) support program developers in their application for the registry, and (3) identify best practices. The resulting “Best Practices Registry for Suicide Prevention” ([http://www.sprc.org/featured\\_resources/bpr/index.asp](http://www.sprc.org/featured_resources/bpr/index.asp)) includes evidence-based programs, expert and consensus statements, and standards for practice. Excluded from review were programs that aimed only to improve knowledge, attitudes, or procedures rather than behaviors. Of 55 reviewed program evaluations, only 12 were deemed evidence-based (Rodgers et al. 2007). Eight of the evidence-based programs listed in the BPR as either “effective” or “promising” are specifically targeting youth, and two (“SOS”, Signs of Suicide, and Zuni Life Skills Development, see below for details) that directly aim at suicidal ideation or behaviors (not just attitudes or knowledge) are also listed as evidence-based programs in the National Registry of Effective Programs and Practices (NREPP, <http://www.nrepp.samhsa.gov/index.htm>) which is now continuing the work of the Best Practices Registry for Suicide Prevention.

### **Reviews and Individual Studies**

Several reviews of published literature have been conducted and will be summarized in the following. First, insights about screening and/or assessing youth for suicide risk are presented followed by reviews and studies of outpatient treatment, of school-based prevention, of emergency-room programs, and of additional prevention strategies.

#### ***Screening and Assessment***

Several publications evaluated screenings and the process of implementing such assessments for suicidal youth. Overall, authors conclude that screenings are promising tools for identifying at-risk youth, but can be challenging to implement and require being embedded within other service components (Fortune & Hawton, 2005; Overholser & Spirito, 2003; Pena & Caine, 2006).

✓ *Prevention/screening programs are not creating risk*

One frequently discussed barrier and objection to suicide prevention programs revolves around the question of iatrogenic effects of such efforts; in other words, if suicide prevention programs inadvertently cause youth suicide. Successful implementation of prevention programs requires dispelling the myth that talking about suicide “gives youth the idea” (Kalafat, 2003). While some strategies (such as graphic depiction of suicides, testimonials by youth who attempted suicide, as well as screenings or one-time assemblies without appropriate follow-up) are indeed contraindicated because they could increase suicidality in at-risk youth, carefully planned prevention programs do not show iatrogenic effects. An experimental study by Gould et al. (2005) examined the effects of a suicide screening procedure on 2,342 students age 13-19 in New York State and found no detrimental effects on rates of depressive feelings, or likelihood of reporting suicidal ideation. These findings also held true for youth deemed high-risk (those with symptoms of depression, substance use problems, or previous suicide attempts). The authors conclude that screening in high schools is a safe component of youth suicide prevention efforts.

✓ *Use a combination of multiple, complementary assessment methods*

Results of an exploratory study point to the unreliability of a single type of assessment and underscore the helpfulness of using complementary assessment methods (Velting, Rathus, & Asnis, 1998). The study involved 48 (n) mostly female Hispanic adolescents ages 12-20 in an outpatient suicide prevention program in the Bronx, New York City. Youth first responded to a self-administered assessment battery, and later to a semi-structured interview. Results of a comparison showed that 50% of adolescents provided discrepant information. In a post-interview discussion with adolescents, youth indicated that most of their non-converging responses were due to confusion about how to understand definitions of terms such as “suicidal gestures” versus “suicide attempt,” or “suicidal ideation” versus “gestures.” For instance, youth tended to identify actions as “attempts” on the self-administered assessment and as “gestures” in the interview. It remained unclear, which other factors lead to inflated or minimized reporting (e.g. did the presence of an interviewer lead youth to give socially desirable, inflating, or minimizing reports?).

✓ *Screenings can help identify at-risk youth otherwise overlooked*

Pena and Caine (2006) reviewed seven screening tools and found they could identify at-risk youth who may otherwise be overlooked but not all instruments are equally reliable especially with more diverse populations. Most of the seven reviewed screening tools were fairly brief and included items regarding suicidal ideation and previous attempts. Some, in addition, assessed depression, anxiety, substance use, hopelessness, self-evaluation, or stress. Because different standards are used for constructing instruments, authors found it somewhat difficult to compare them. Tools identify between 10-30% of youth depending on the cutoff scores used. Trying to identify youth with a variety of risk levels, so as to not miss any youth with needs, may inadvertently also result in a high number of “false positives.” In one study, such high rates of identified students overwhelmed the schools’ capacity for follow-up and led to discontinuation of the screening after two semesters (Hallfors, Brodish, Khatapoush, Sanchez, Cho, & Sleekier, 2006). In addition, it is crucial to remember that screenings capture only a particular moment in time. In other words, the situation of youth who screened “not at-risk” today may very well change in three months time (Ciffone, 2007). Thus, decisions about implementing screenings must also consider the intervals at which screenings are repeated.

✓ *Screening requires resources for timely and appropriate follow-up*

Screening efforts can have immediate effects on school practices, and require resources for a timely follow-up with those youth identified as having needs. Gutierrez, Watkins, and Collura (2004) describe the impact of a screening component which identified 11% - 20% of students as requiring some sort of follow-up or intervention. After referral to a psychologist for a more in-depth interview, all identified students agreed to and received some type of service matched to their category of need (either monitoring, intermediate, or intensive services). Teachers’ awareness of risks, and readiness to refer youth also seemed to increase. Therefore, the authors point out that screening efforts must be combined with sufficient and appropriate resources for referral and treatment services. At the same time, the referral of “false positives,” i.e. youth who wrongly scored “at risk,” for in-depth interviews may have inadvertent negative effects such as anger, embarrassment, and unwanted perception of mental health services as being intrusive (Ciffone, 2007).

✓ *Involvement of educators and administrators in planning and implementation*

Kalafat and Ryerson (1999) evaluated a county wide suicide prevention effort ten years after implementation. High School staff from 46 public schools responded in surveys and 11 participants were involved in qualitative interviews about implementation and institutionalization of the Adolescent Suicide Awareness Program (ASAP). ASAP is a universal prevention effort developed by community mental health centers in collaboration with educators, and includes administrative/organizational consultation, links with community gatekeepers, training for all school personnel (teachers, support staff, cafeteria workers, bus drivers, etc.), parent training, and student curricula. Results of the study indicate that the vast majority of school retained the program in some form although most also had reduced the allotted time, and made the once stand-alone program part of existing classes to ease scheduling. Schools adapted and changed program content over time, for instance to include new knowledge about the link to substance abuse. Successful retention of the program was associated with supportive administrators and continuity of key staff teaching the program.

### ***Reviews of Outpatient Intervention/Prevention***

Rudd, Joiner, Jobes, and King (1999) reviewed the outpatient prevention literature for adults and youth, and found empirical support for: (a) intensive follow-up treatment for high risk youth following a suicide attempt; (b) effectiveness of short-term CBT that integrates problem solving as a core intervention to reduce suicidal ideation, depression, and hopelessness for periods of up to one year (though not necessarily beyond that); (c) a need for longer term treatment to decrease suicide attempts (building specific skills like emotion regulation, higher stress tolerance anger management, interpersonal assertiveness, etc.); and (d) safe and effective outpatient treatment for high-risk youth if options for acute hospitalization are available and accessible.

Gould et al. (2003) reviewed empirical literature from 1992-2002, and concluded that screening for at-risk youths, education of primary care physicians, media education, and lethal-means restriction are promising prevention strategies, but all need continued evaluation research. Similarly, Dialectical Behavior Therapy (DBT), cognitive-behavioral therapy, and treatment with antidepressants were identified as promising treatments.

MacGowan (2004) reviewed 10 empirical studies of psychosocial interventions to reduce suicidal behaviors or ideation for adolescents (ages 10-17). Overall, the author concludes that none of the interventions thus far could be defined as “well established” and

only two were deemed “probably efficacious.” Most study samples consisted of a majority of girls (average of 86.5% across the studies); three studies involved mostly Caucasians, another three included a majority of Hispanics or Latinos/as, and one study involved mostly African Americans. Interventions showed variability but most often involved short-term (6 months or less) approaches that contained CBT (such as monitoring and modifying thoughts, assumptions, and beliefs, building problem-solving skills, as well as communication, affect regulation, and social skills). Most interventions involved youths’ families and/or others, and some included group components. Of the six studies that assessed suicide attempts or deliberate self-harm, only two reported successful outcomes. Specifically, the author found that developmental group psychotherapy was effective to reduce self-harm. Family interventions, such as family communication and problem solving, was likely to reduce suicidal ideation but only in a sample without major depression. (Researchers speculated that the brief five-session format may not be sufficient for youth with major depression). Short-term, outpatient treatments were a successful alternative to hospitalization in two studies proving effective in reducing suicide attempts or deliberate self-harm. CBT and problem solving were included in many of the most successful interventions. For youth with borderline diagnoses, DBT was helpful, and short-term interventions that involved families typically increased youths’ compliance.

Goldney (2005) conducted a selective pragmatic review of the literature, and identified nonpharmacological and pharmacological strategies for suicide prevention. The author found that among nonpharmacological approaches some studies support reduction of media coverage, and effectiveness of Linehan’s Dialectical Behavior Therapy (DBT) model for patients with Borderline diagnoses. Among pharmacological methods antidepressants, mood stabilizers, and antipsychotic (neuroleptic) medication have shown to be effective.

A review of by Fortune and Hawton (2005) focused on recent updates of the empirical literature published in 2004 and 2005, and includes the use of SSRIs, cognitive behavior therapy (CBT), DBT, multisystemic therapy (MST), and known barriers to seeking help. The authors conclude that findings and recommendations about the use of SSRIs are still conflicting and therefore confusing to practitioners. Evaluation of the effectiveness of CBT is only beginning, but first findings indicate that CBT plus fluoxetine seems more effective than CBT or fluoxetine alone, and fluoxetine alone is superior to CBT alone. Dialectical Behavior Therapy (DBT) has been tested with young inpatient populations and shown favorable results, as has Multisystemic Therapy (MST) in a residential facility. In contrast, nondirective

approaches seem less effective for suicidal youth. Overall, little is known about how to successfully engage suicidal, depressed youth; few youth -- males even less -- seek help themselves but tend to isolate themselves or, at best, turn to peers. Among existing prevention programs, Signs of Suicide (SOS, see below for details) has shown a modest impact.

Singer (2006) specifically sought literature about effective prevention and intervention for suicidal youth who suffer from both Major Depressive Disorder and Attention Deficit Disorder (ADHD/MDD). The author found no effective treatment for youth with comorbid MDD/ADD conditions. He suggests a two phased treatment beginning with (a) assessment and treatment of acute crisis and intervention that negotiates a no-harm contract, limits availability of lethal means, offers support and 24-hour availability, etc. followed by (b) treatment to reduce the comorbid symptoms.

Similarly, Berman, Jobes, and Silverman (2006) recommend that before focusing the symptomatology of an underlying psychiatric disorder, treatment best addresses specific suicidal behaviors through a pragmatic collaborative effort. This effort includes crisis intervention, and hospitalization when necessary. Once treatment is past the crises phase, clinicians can focus on broadening the clients' linkages to other support and treatment systems. The authors point out that only a minority of adolescents follows through with treatment because it can be difficult to engage adolescents and their families after a suicidal act. The suicide attempt, the sudden involvement in the mental health system, and the attached stigma can dramatically alter the dynamics in the family. It may be necessary to offer youth individual therapy in addition to, and sometimes instead of, family therapy. As with other therapeutic efforts, a strong therapeutic relationship is key for successful clinical management of the delicate balance between maintaining authority and being accessible, authentic, and flexible toward youth and families. Berman, Jobes and Silverman also emphasize the role of attachment as an integral part of the treatment. Therefore sessions are best scheduled with greater frequency initially and then with continued regularity but more infrequently, and termination of treatment must be carefully structured. For the acute phase, the authors recommend intensive monitoring including case management, telephone contacts or home visits, and for the treatment phase, short term cognitive-behavioral therapy that integrates problem solving as a core intervention to reduce suicidal ideation. Counterindicated for suicidal youth are nondirective supportive therapy models.

Finally, Klomek and Stanley (2007) reviewed treatments for depression and suicidality and found that treatments for suicidal youth are still being developed and only two approaches for depression in adolescents can be considered evidence-based. The authors posit that the most promising results thus far were found in trials of DBT adapted for adolescents (DBT-A, see below for details). Another program, the Youth Nominated Support Team (YST, King et al., 2006) found no overall intervention effects, but modest intervention effects on suicidal ideation in girls. A recent NIMH initiative called “Treatment of Adolescent Suicide Attempters” (TASA) combines antidepressants and components of CBT, DBT, and family therapy and is currently under study; results have not yet been published.

### ***Individual Studies of Outpatient Prevention/Intervention***

An adaptation of Linehan’s Dialectical Behavior Therapy (DBT) has been developed for depressed and suicidal youth in outpatient treatment (Miller, Rathus, & Linehan, 2007). In a quasi-experimental study (Rathus & Miller, 2001), results for 29 young people in the experimental group were compared to 82 youth receiving treatment as usual (12 weeks of psychodynamic individual treatment plus family therapy). DBT was adapted to shorten the length to 12 weeks, to include parents in skills training, and family members in individual therapy where indicated, reducing the number of skills taught and simplifying language for adolescents. Though limited by small sample size, lack of randomization and follow up, results of the study support effectiveness of the model. Despite greater severity of problems pre-treatment, the DBT group had fewer hospitalizations and a higher rate of completing treatment. No differences were found for suicide attempts, which was positive given the higher rate of severity, more borderline features, and a higher rate of previous hospitalizations in DBT group.

Few strategies particularly targeting Gay, Lesbian or Bisexual youth are reported in the literature. Development and testing of an Attachment-Based Family Treatment (ABFT) approach specifically intending to aid suicidal LGB youth is currently under way (Diamond, Jurgensen, & White, 2007). Based on existing protocols of ABFT which is designed to ameliorate depression and suicidal ideation among adolescents, this three year project will adapt the manual for specific content, tasks, and therapeutic strategies for LGB youth and their families, and conduct a pilot randomized clinical trial.

### ***Reviews of School-Based Prevention***

Only about 20% of U.S. schools offer a suicide prevention program (Speaker & Peterson, 2000). Three types of prevention strategies/programs can be distinguished: (a) teacher/staff training; (b) school wide screening; and (c) curriculum based programs (Eckert, Miller, Riley-Tillman, & DuPaul, 2006).

Ploeg et al. (1996) reviewed 11 published and unpublished curriculum-based prevention programs. They found that programs varied widely as to duration and intensity (from single session of 1 to 1.5 hours to 12 weeks of 50 minute sessions), were typically provided by teachers and counselors, and most frequently targeted high school age students. Outcomes included suicide risk, knowledge, attitudes, coping, hopelessness, and empathy. Overall, authors found insufficient empirical support for curriculum based programs. Positive effects were noted only for increasing knowledge and awareness which, by itself, is not yet sufficient to reduce suicidality. Authors also noted gender differences in attitudes toward helping, self-reported coping, and hopelessness. In these outcome areas girls tended to benefit whereas boys were negatively affected by programs.

In their review, Shaffer and Pfeffer (2001) conclude that suicide awareness programs in schools frequently fail to emphasize the role of mental illness in suicidality. Although designed to encourage disclosure by students, awareness programs have not been shown to be effective either in reducing suicidal behavior or increasing help-seeking behavior. Authors recommend an approach that focuses on signs of depression or other psychiatric disorders linked to suicidality. They discourage simply holding talks or lectures about suicide, which can disturb some high-risk students, in favor of self-administered questionnaires to screen and providing appropriate follow up. The authors point out that teenagers in mid to late adolescence will, if asked directly, reveal information about suicidal tendencies.

Kalafat (2003) distinguishes between universal and indicated programs in schools. Although results are somewhat mixed, evaluations show that brief interventions consisting of a risk assessment, crisis intervention, and enhanced connection with caring adults can be sufficient for affecting short-term attitudes and ideation. As an example serves “Reconnecting Youth” which uses a partnership model involving peers, school personnel, and parents to create school bonding activities, involve parents, and initiate school crisis-response planning. Contraindicated are one-time efforts (such as school assemblies), media depictions of suicidal behavior, or presentations by youth who made suicide attempts. The author also discourages

outsourcing programming to other organizations instead of making use of local school expertise, or restricting programs to any single approach or strategy (such as annual screenings only). Overall, the author concludes that there is some empirical support for these programs but more systematic evaluations are needed. Carefully designed and implemented programs can be sustained in schools but await more systematic evaluation.

Gould's et al. (2003) review found that increased attention has been granted to school-wide screenings with multistage assessments. These screenings tend to focus on risk factors such as depression, substance abuse problems, recent and frequent suicidal ideation, and past suicide attempts. Dilemmas associated with screening programs are the changing nature of suicide risk over time, which may require multiple screenings to minimize "false-negatives." Screenings also appear to be less acceptable to high school administrators, and are effective only when a referral system is in place that can immediately connect a student and his or her family to appropriate, accessible, and affordable services. While most of these screenings still await further evaluation research (Gould et al., 2003), the Columbia Teenscreen (see more details below) has proven effective. Another school-based strategy is gatekeeper training aimed at increasing knowledge, attitudes, and skills in school personnel to enable them to identify students at risk, determine the levels of risk, and make referrals when necessary. These strategies have gained some empirical support and require further testing (Gould et al., 2003).

### ***Individual School-Based Programs***

Six school-based prevention programs are currently listed in the Registry of Evidence-Based Suicide Prevention Programs (EBPP), and three of them (identified below with an asterisk) also made it successfully into the National Registry of Evidence Based Programs and Practices (NREPP) .

#### **C-Care /CAST (Counselors Care/Coping and Support Training)**

C-Care/CAST is designed for at-risk students ages 14-18 years and combines individual counseling with a series of small-group training sessions. Classified as "effective" by the EBPP, the program first offers two sessions for a computer assisted, interactive, and personalized assessment and motivational counseling intervention, followed by 12 group sessions (1 hour each) aiming at skill building and enhancing social support. [CAST is an adaptation of the earlier "Reconnecting Youth" program; see below] Results of an evaluation study (Randell, Eggert, & Pike, 2001) lent preliminary support for the combined intervention.

Costs for training and materials vary.

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The Columbia University TeenScreen\*

A screening instrument for youth ages 11-18, the Columbia TeenScreen is considered “promising” by registry reviewers. It intends to identify youth at-risk for suicide and possibly suffering from mental illness so that they can receive more complete mental health evaluation. To this end youth complete one of three self-administered screening instruments (the Columbia Health Screen, the Columbia Depression Scale, or the Diagnostic Predictive Scales). Students who are identified as showing risk are then interviewed by a clinician to determine if further evaluation is needed. Those students who require further services are referred to a case manager who arranges appropriate services. At this point, screening instruments as well as consultation, training and technical assistance are offered free of charge.

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Lifelines

Lifelines is a prevention curriculum for teens ages 12-17 and classified as “promising” in the EBPP. It consists of four 45-minute lessons which focus on improve knowledge, help seeking attitudes, and school resources, discuss warning signs of suicide, role-play encountering a suicidal peer, and show one video about appropriate and inappropriate responses to a suicidal peer, and one that documents an actual response of three former Lifeline participants.

The program manual is available for \$40.

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### Reconnecting Youth

Considered “promising” by EBPP registry reviewers, Reconnecting Youth is a semester-long (ca. 80-90 days) skill building program for young people ages 14-18 who exhibit indicators of poor academic achievement, might dropout, and other at-risk behaviors including suicide-risks. Integrating small-group work and life-skills training, the curriculum includes classes on self-esteem enhancement, decision making, personal control, and interpersonal communication, booster and review sessions, as well as social activities and bonding components to enhance protective factors. In addition, a crisis response plan for the school addresses school-wide prevention and intervention, and parent involvement requires active consent and at-home support. A study by Thompson, Eggert, and Herting (2000) identified that group leadership (i.e. teacher support) plays a pivotal role since it increased peer support, which in turn had some positive effects on suicidal behaviors and perceived personal control.

Program costs vary according to the components and consultation/training services purchased.

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### Signs of Suicide (SOS)\*

Thus far, SOS is the best empirically supported school-based prevention program and listed as such in the NREPP<sup>1</sup>. SOS is a two-day universal program for youth ages 13-18 years, and combines a curriculum component (involving a video and teacher-led instruction) aimed at raising awareness with a screening component to identify youth with depression and at risk for suicide. Implemented at more than 3,500 schools in North America and Ireland, the program has undergone two experimental studies involving a total of more than 6,000 students in five high schools. The first study of SOS (Aseltine & DeMartino, 2004) showed

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<sup>1</sup> SOS's listing as “promising” in the older Registry of Evidence-Based Suicide Prevention Programs is likely a dated categorization which did not yet take into account more recent findings of effectiveness for this program.

that participants were 40% less likely to report suicide attempts in the past 3 months and modest changes in knowledge and attitudes. Also, lower (but not statistically significant) suicide ideation was found for participants, but no changes for help seeking behaviors. Consistent with other research, girls showed higher knowledge as well as more adaptive attitudes and help seeking behaviors.

The most recent replication study of SOS (Aseltine, James, Schilling, & Glanovsky, 2007) involved over 4,000 adolescents containing an equal number of male and female students, with high ethnic diversity of 35% Hispanic, 25% White, 24% Black or African American youth between nine different high schools across three states. Results confirm earlier findings and show significantly lower rates of suicide attempts, and greater knowledge and more adaptive attitudes about depression for students in the intervention group independent of race/ethnicity, grade, and gender. No effect was found for help seeking which held true for youth from different socioeconomic backgrounds and requires further research. Like the earlier study, this one, too, is limited by a lack of longer term follow up data beyond three months post intervention, and a lack of baseline pretest data.

Spanish language versions of the student screening form and parent instrument are available. Program costs of \$ 300 are indicated for materials (also available in Spanish). One to two hours of teacher training and a site coordinator are required.

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American Indian Life Skills Development/ Zuni Life Skills Intervention\*

This program is the only culturally specific prevention included in the NREPP. It has originally been developed for 14-18 year old Zuni high school students. With cultural adaptations, the curriculum has since been extended to the broader American Indian Life Skills Development which can be used by other Native Peoples. (According to the NREPP, recent adaptations have been developed for middle school students on a reservation in the Northern Plains area; for Sequoyah High School in Tahlequah, Oklahoma, for youth of the Cherokee Nation and for young women of the Blackfeet tribe.) The curriculum based program focuses on building life and social skills to decrease hopelessness and increase suicide prevention skills. A quasi-experimental study (LaFromboise, 1995) found significant

decreases in hopelessness and higher abilities for participating students to role-play suicide intervention skills and problem-solving skills. Delivered by a team of teachers, community leaders, and representatives of social services, students participate in interactive lessons three times a week for about 30 weeks. Most lessons include brief culturally relevant scenarios and interactive exercises. Implementation requires extensive involvement of community leaders, teacher training, and a school counselor as the on-site curriculum coordinator.

Program costs for materials are listed as \$30. Training costs may vary.

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Not listed in the registries is the Mental Health CPR program which trains youth to establish a no-harm-agreement with suicidal persons in order to delay suicidal activity until professional assistance can be obtained (Hennig, Crabtree, & Baum, 1998). In a quasi-experimental study, 396 (n) high school youth were exposed to the program which consists of a training curriculum including exercises. Results seven weeks after program completion indicate that participants were more likely to ask if a friend had suicidal thoughts, were more likely to call 911 when appropriate, and significantly more likely to ask an at-risk individual to refrain from any self-harming actions until professional assistance is secured.

Another curriculum-based program not included in registries is the South Elgin High School (SEHS) program which aims to change the presumption that suicide is a “normal” response to stress, and reducing the stigma of mental illness (Ciffone, 2007). As recommended by the author SEHS sets out to combine a well-designed curriculum that emphasizes suicide as being linked to treatable mental disorders with a follow-up screening. In its entirety the program includes staff polices, freshman orientation, on site social workers, structured discussions about depression (10<sup>th</sup> gr.), prevention information, screening, intervention for at-risk youth, and postvention. Assessed in an experimental study were program components offered to 10<sup>th</sup> graders during a three-day curriculum. Replicating an earlier study, results show significant short-term improvements in attitudes about suicide independent of school, gender, or presenter.

### Prevention for Gay, Lesbian, and Bisexual Youth

Goodenow, Szalacha, and Westheimer (2006) report on a study examining the effects on *increased school support* for LGB youth through support groups, antibullying policies and other school factors. They found that sexual minority youth in schools that offered support groups reported lower rates of victimization and suicide attempts than those in other schools. Being victimized less and perceiving more staff support predicted lower suicidality. Similarly, antibullying school policies were strongly and significantly associated with fewer suicide attempts.

### ***Emergency-Room Prevention Programs***

Based on a survey study of Emergency Room nurses in Illinois (Grossman et al., 2003) which found that a large majority (80%) of nurses had had recent experiences with suicidal youth, but only few had ever received means restriction training, or knew to provide means restriction education to parents, Grossman et al. developed the “ER Means Restriction Education for Parents.”

The “ER Means Restriction Education for Parents,” is one of two prevention programs implemented in emergency rooms and listed in the Registry of Evidence-Based Suicide Prevention Programs. Classified as “effective” it is conducted by ER department staff and aims to educate parents of high-risk youth (ages 6-19) as to why the child is considered at increased suicide risk, and how they can reduce risk by limiting access to lethal means for suicide (including firearms, over-the-counter and prescribed medications, and alcohol). Staff also helps problem solve issues of safe disposal of means, collaboration with law enforcement etc.

Program protocols are available for free, training costs for ER personnel vary.

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The “Specialized Emergency Room Intervention for Suicidal Adolescent Females” targets teen girls and their mothers, and is considered “promising.” Its components include a single two-hour training session for ER physicians and staff (psychiatrists, pediatricians, nurses, security guards, and admitting support staff); a 20-minute video tape for suicide attempters and their parents highlighting the importance of outpatient treatment (also available in

Spanish); and meeting of teens and mothers with a crisis therapist to discuss the video, conduct screenings, an initial therapy session, and contract for follow-up treatment. In a quasi experimental study with 140 mostly Hispanic female adolescents (Rotheram-Borus, Piacentini, Cantwell, Belin, & Song, 2000), researchers measured effects on suicidality, psychiatric symptoms, family cohesion 18 months after the intervention. The greatest impact was found for lowering emotional distress in mothers, and increased family cohesion for youth who had high levels of psychiatric symptoms. In addition the program was associated with significantly lower depression scores in youth.

Training costs vary. Protocols are free and available online at <http://chipts.ucla.edu/interventions/manuals/interer.html>

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***Other Prevention Strategies and Programs***

• ***Hotlines***

Although there is some evidence that telephone hotlines can have a positive short-term impact on suicidal callers (King, Nurcombe, Bickman, Hides, & Reid, 2003), youth rarely access this source of assistance. Results of a study by Gould et al. (2006) indicate that, even though the vast majority of youth are aware of the existence of hotlines, only very few adolescents (2.1%) ever used them. More yet, negative attitudes toward the use of hotlines were higher than for other sources of help. The most often cited reasons for not using or wanting to use hotlines were self reliance (such as seeking help elsewhere, not feeling like needing help etc.) and shame. In addition, objections to hotlines were highest in youth who seemed to have the highest needs. Females generally indicated more positive attitudes toward help seeking, including hotlines. The authors suggest that the internet may be a more easily utilized source of help than phone services.

• ***Means Restriction***

Restricting access to firearms as a public health measure can result in a short-term reduction in the rates of suicide, although there is not yet evidence that this effect can be maintained over a longer period of time (Shaffer & Pfeffer, 2001). A quasi-experimental study by Webster et al. (2004) found evidence that Child Access Prevention (CAP) laws, focusing on safe storage of guns, are associated with a modest reduction in suicide rates

among youth aged 14 to 17 years (8.3% decrease). Especially, practices such as keeping a gun locked and unloaded, and storing ammunition in a separate and locked location are each associated with a protective effect in homes where guns are present (Grossman et al., 2005). Minimum age restrictions for the purchase and possession of firearms as currently implemented do not appear to reduce overall rates of suicide among youth (Webster et al., 2004).

Other effective public health measures include smaller package sizes for paracetamol and other potentially toxic substances, and safety barriers for high structures (Goldney, 2005).

*Note:* For depressed and suicidal youth, restricting access to firearms (and other lethal means) is an *essential* component of suicide prevention.

- ***Media Education***

In 1994, the Centers for Disease Control (CDC) first issued guidelines for professionals, reporters, and editors, pointing to the risks of certain news coverage of suicide to contribute to contagion effects. Subsequently, the Robert Wood Johnson Foundation (2007) funded the dissemination of new guidelines for responsible coverage, as well as research to determine effects of the effort. Research conducted by the Annenberg School for Communication Public Policy Center at the University of Pennsylvania found evidence for a change in reporting practices following the release of the new media guidelines. (The full text of the guidelines is available at <http://www.sprc.org/library/sreporting.pdf>; for an abbreviated version of the CDC media guidelines see Appendix B.)

- ***Gatekeeper Education/Training***

Chagnon, Houle, Marcoux, and Renaud (2007) evaluated a 3-day training (1 day/week) for professionals working in education or community agencies. Seventy-one mostly female professionals participated in lectures and role plays to increase skills for screening, intervention and referral. Results show statistically significant increases in knowledge, attitudes and skills for experimental group which were maintained at six months follow up. Still, knowledge scores were still relatively low for participants leading authors to wonder if longer term training may further increase program effectiveness.

- ***Parent Education***

Two Australian studies (Maine, Shute, & Martin, 2001; Toumbourou & Gregg, 2002) evaluated parent education programs and found improvements in knowledge, attitudes, responses to warning signs, as well as effects on some adolescent behaviors but no changes in youth suicidality.

## **Perspectives of Youth, Families, and Professionals**

In addition to outcome research a number of articles were found that illuminate the specific insights and opinions of young people, their families, and professionals in the field.

### ***Youth and Families***

An Australian qualitative study (Gair & Camilleri, 2003) interviewed nine young people (ages 16-24) about events leading to their suicide attempt and their help-seeking behaviors. Results indicate that paths to suicide attempts were either put into terms of a cumulative progression of factors, or described as a more impulsive act. Participants described using as means for their attempt overdoses of drugs but also more violent ways such as hanging, attempting to jump before a moving object, and use of weapons. No clear gender differences were evident in the choice of means but more females reported multiple attempts to take their lives. Participants distinguished the unique nature of each individual attempt describing them as more or less serious. Thus, not all attempts were described as having the same intent. In terms of help seeking, some youth described seeking help by reaching out to family, significant others, school counselors or local community service providers, but also mentioned reluctance to ask for help, doubting the benefits, and feeling betrayed by helpers. Barriers to help seeking included traditional male gender roles, and distrust in professionals' ability to help. Youth suggested that useful assistance could include education in schools about depression and suicidality, active and flexible outreach to build relationships early, and more informal friendship ('mate') roles by workers.

A qualitative study inquired about perspectives of three youth on an integrated assessment and intervention model approximately 1.5–2.5 years since their initial assessment (Murray, & Wright, 2006). One 19-year-old female and two male participants aged 18 and 14, respectively, had participated in a systems and solution-focused treatment program following their hospitalization for suicidality. The nurse-delivered model emphasizes engagement and the development of a connectedness with youth and their families, and includes assessment, individual, and family therapy. Three main themes were identified: (a) change: initial assessments were considered helpful in reducing anxiety, and providing a sense of regaining control, leading to changes in thinking, other internal changes as well as changes in relationships; (b) hope: participants identified a shift from hopelessness to having more hope, recognizing their self-efficacy in problem solving, and the importance of not feeling alone; (c) connection: youth underscored the importance of feeling connected to the nurse and the importance of feeling cared about. The authors conclude that a collaborative,

strengths and skill focused approach is important in establishing a positive connection, as is furthering cooperation by communicating clearly and in a non-judgmental way, and attending to familial and community context.

Coggan and Patterson (1998) describe results of 12 focus groups with 140 (N) youth. Identified barriers to seeking help included a lack of knowledge about where to turn to in a crises, and difficult family dynamics in young adulthood that create another barrier to utilize available resources. In addition, youth felt that health professionals were often too impersonal, too expensive and took too long to get involved.

A qualitative study of at-risk youth in Australia (Pullen & Gow, 2000) focused on what youth perceived as helpful responses. The two phased study first involved focus groups with 407 (n) young adults (ages 18-30) enrolled as first year social science students. Based on responses researchers composed a list of 12 helping responses which were then presented to 43 (n) mostly female students for further comments. Eventually, the twelve responses identified as helpful were (Pullen & Gow, 2000, p. 34): (1) be readily available; (2) understand youth culture; knowledge and interest in youth culture was seen as encouraging confidence in counselor and the helping relationship; (3) listen carefully, do not jump in, it's the youth's time to talk; (4) acknowledge youth's ambivalence about wanting to live or die; and pair it with empathic understanding; (5) be empathic though empathy alone was not seen as sufficient; (6) explore problems and solutions together; (7) encourage self-worth and competence; (8) provide information/ advice, and referral – a more directive approach where it seems indicated; (9) assist youth in feeling safe and calm (before exploring solutions); (10) avoid judgmental or patronizing responses; (11) be confidential (except in cases of immediate risk for harm); and (12) encourage a different perspective (hope, reasons to live).

Surviving parents (n=46) of youth who committed suicide responded to a questionnaire with open ended questions in a qualitative study by Stanley (2005). Asked if and when they had recognized warning signs, three different groups of responses emerged: (A) 21 parents indicated they had recognized warning signs only in hindsight, if at all. It appeared that young people had successfully concealed their distress, or their signals were too difficult to distinguish from normal adolescent behavior. Four parents described cases in which they had not identified any warning signs even with the benefit of hindsight. Otherwise, social withdrawal was the most frequently mentioned sign (12 parents), followed by sleep problems. Problems with appetite or eating, self-harm, alcohol and illicit drugs

were also appearing as warning signs of depression in hindsight. (B) Fourteen parents had observed warning signs but did not associate them with intent to commit suicide. Eight of them saw their child as depressed although the extent of described symptoms varied. In some families, parents saw fluctuations in the same signs observed by parents in group A. (C) Seven parents indicated they recognized warning signs at the time, including five parents who reported that their child had made a previous (and quite serious) attempts, and two who observed direct and deliberate preparations for suicide. As to their experiences of professional help, two-thirds of the parents (31) indicated they had not received needed help, including service shortfalls such as lengthy waiting lists, lack of referral to specialists for depression, and barriers in communication with professionals (such as feeling sidelined by professionals). Parents also expressed they wished they had been more insistent/assertive in asking for appropriate services. Their messages to other parents included: talk more about emotions and feelings to children, even if they appear happy; keep lines of communication open and trying not to be judgmental; take depression and any expression of suicidal ideas seriously and seek professional assistance.

Views of parents and elders of a tribe in the Pacific Northwest (Strickland, Walsh & Cooper, 2006) highlight how understanding of (and subsequent intervention in) youths' hopelessness and depression is embedded in culture. In focus groups with 40 American Indian parents and individual interviews with nine elders participants put the high youth suicide rate in Native communities into larger historical and socioeconomic contexts. Participants saw a need for family and community-based interventions that aim to reduce stress, depression, and hopelessness. These stressor were seen as embedded in historical and ongoing discriminatory experiences which perpetuate a vicious cycle of fractured families, difficulties in school and on the job market, and alcohol abuse. Interventions must recognize and incorporate the value tribes put on holding the family together and healing intergenerational pains.

A qualitative analysis of interviews with 41 youth in Australia specifically sought to understand the notions of shame, waste, and other cultural vocabulary in the metaphors and stories of young people (Fullagar, 2003). The sample included youth (ages 15–24) from different socio-economic and geographic locations, but the majority were of Anglo-European descent. The author found that shame plays a predominant role in the narratives of suicidal experiences and in the expression of emotions and social relations. Therefore, Fullagar argues for the need to recognize the social dynamics of shame, and takes issue with constructions of

suicidality as a mere calculation of risk and protective factors. Instead the author stresses the intersubjective and relational nature of feeling shame and humiliation which often underlies suicidality.

### ***School Staff***

A questionnaire study of 167 (n) High School teachers in five schools in the Midwest (Westefeld, Kettmann, Jenks, Lovmo, & Hey, 2007) points a high need for educating teachers about risk factors, training youth and teachers in responding to suicidal youth, and developing a prevention and response plan at each school. While 61% of respondents thought suicide to be an important issue, 73% worried about a young person being suicidal, and 78% knew a young person who had committed or attempted suicide, 47% of respondents indicated they do “nothing” when they wonder about the suicidality of a student, 67% were not aware of any policies at school for intervening, and 40% did not know of any resources at school for prevention or intervention.

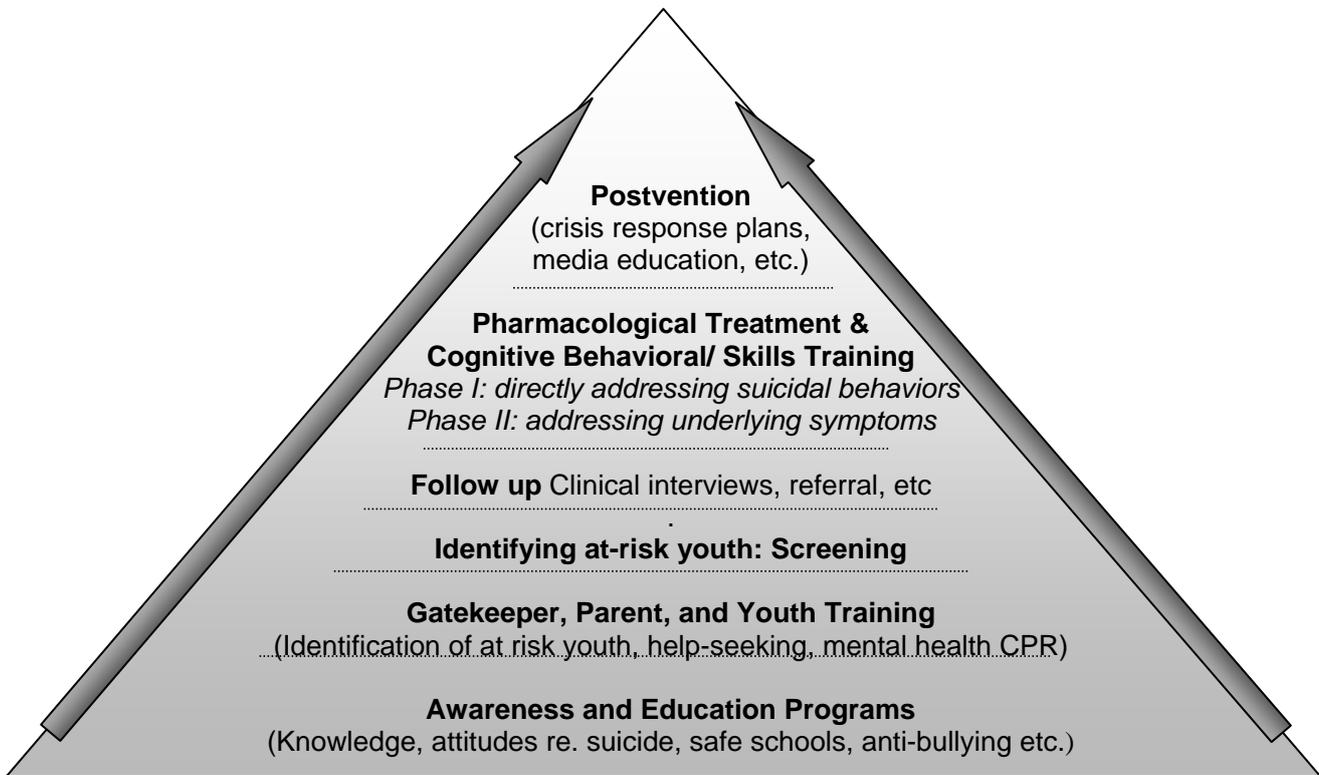
A series of three studies examined the acceptability of the prevention programs among school principals, superintendents, and school psychologists, respectively (Eckert, Miller, DuPaul, & Riley-Tillman, 2003; Miller, Eckert, DuPaul, & White, 1999; Scherff, Eckert, & Miller, 2005). Results show that all three stakeholder groups favored curriculum and staff in-service programs significantly over schoolwide screening. A similar inquiry with a population of older adolescents/young adults (Eckert, Miller, Riley-Tillman, & DuPaul, 2006) identified that youth are somewhat less comfortable with staff-training than professionals were. Most notably, however, significant gender differences were found. Women rated the curriculum-based program and staff in-service training as more acceptable than did their male counterparts, and also rated the curriculum-based program as significantly less intrusive and less time demanding than male participants. The authors conclude that adolescent males find staff in-service and curriculum-based programs to be the least beneficial and acceptable and may be less likely to participate in or benefit from curriculum-based prevention efforts. Therefore screenings and alternative programming may need to be developed for males whereas young women may be more likely to benefit from staff in-service training and curriculum-based programs.

### **Summary: Best Practices**

Best practices in the prevention of youth suicide make use of a multi-modal approach that includes efforts on every prevention level including intervention and postvention (King,

2001). Effective treatment best targets specific suicidal behaviors through cognitive-behavioral problem-solving and skills training rather than merely addressing the symptomatology of an underlying psychiatric disorder. Underlying symptoms are addressed in a second phase of treatment. (See Figure 2. below)

**Figure 2. Multi-Modal Approach to Youth Suicide Prevention**



Schools are prime sites for identifying at-risk youth, and screenings are promising tools. However, to be effective such school-based programs must be well designed and integrate staff training, screening, and follow-up services. Prevention programs should purport that suicidality is not a “normal” response to stressful circumstances but rather the result of the confluence of multiple factors not the least of which is the presence of a treatable psychiatric disorder. Another site for screening a potentially high risk population are Juvenile Justice facilities. More research and integrated efforts are needed to address the mental health needs, including suicide prevention, in the juvenile justice system.

Any use of antidepressant medications, especially SSRIs, with youth requires close monitoring because there is still conflicting evidence about the relative benefits and risks of these substances.

Further research is needed to find out which types of prevention efforts are most appropriate for male or female youth, respectively, for youth of different ethnic backgrounds, and how to best involve families in prevention and treatment.

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## **Appendix A: CHECKLISTS AND RECOMMENDATIONS**

### **General Recommendations for Outpatient Practice with Suicidal Persons**

Rudd, Joiner, Jobes, & King (1999)

1. Intensity of outpatient treatment should vary with identified risk factors.
2. If the target is a reduction in suicide attempts and related behaviors, treatment should be conceptualized as long-term and target skill deficits.
3. If therapy is brief and the target variables are suicidal ideation, or related symptoms a problem-solving component should be a core intervention.
4. Use an explanatory model of direct and indirect treatment targets.
5. Use a standardized follow-up and referral procedure for clients dropping out.
6. Disclose lack of definitive data regarding the efficacy approaches as a part of informed consent.
7. Pertaining to limits of confidentiality, offer a detailed review of available treatment options, fees, risks/benefits, and the likely duration of treatment
8. Provide an extended evaluation prior to specific recommendations
9. Evaluate for *DSM-IV* Axis I and Axis II diagnoses, document symptomatology.
10. Provide diagnostic and symptom-specific treatment recommendations.
11. Routinely monitor, assess, and document a patient's initial and ongoing risk, document interventions for maintaining safety until suicidality has clinically resolved.
12. For cases of chronic suicidality, monitor, assess, and document ongoing risk, document interventions that address the chronic nature Note the chronicity of some symptoms (e.g., specific suicidal thoughts with a definitive plan), indicating factors that escalate risk (i.e., emergence of intent) versus those that diminish risk (e.g., lack of intent).
13. For acute crisis cases, provide a relatively short-term psychotherapy that is directive and crisis focused, emphasizing problem solving and skill building as core interventions.
14. For chronic cases of suicidality (particularly in the presence of an Axis II disorder), provide a relatively long-term psychotherapy in which relationship issues, interpersonal communication, and self-image issues are the predominate focus.
15. Develop a strong therapeutic alliance and make the clinical relationship central to the outpatient treatment plan (e.g., negotiating access, using the relationship as a source of safety and support during crises, attending to the patient's sense of profound loneliness).
16. Monitor and respond to countertransference reactions to the suicidal patient (particularly those that are chronically suicidal) and routinely seek professional consultation, supervision, and support for difficult cases.
17. Use a clearly articulated scheme for identifying, classifying, and discussing suicidal behaviors in treatment.
18. Use a consistent approach to assessing treatment outcome, incorporating both direct (i.e., suicidal ideation, suicide attempts, instrumental behaviors) and indirect markers of suicidality (i.e., markers of symptomatology, personality traits, or general level of day-to-day functioning).
19. Assess treatment outcome at predictable intervals, using psychometrically sound instruments to compliment and balance patient self-report.

#### ***Special recommendations for adolescents:***

20. Involve parents or guardians in the initial assessment, treatment planning, and ongoing suicide risk assessment process. Acknowledge their helpful contributions and empower them to have positive influences in their roles as parents and caregivers.
21. Evaluate the parent or caregiver's ability to fulfill essential parental functions and maintenance of a safe, nonabusive environment. If there exists a concern, address with parents or caregivers directly and notify protective services if appropriate.
22. Evaluate the parent or caregiver's ability to fulfill other parental functions such as consistent limit setting with follow through, healthy communication with the adolescent, and positive role modeling. Recommend treatment for severe, identifiable parental psychopathology and recommend interventions as needed.

<b>Best Practice Outpatient Intervention with Youth in an Acute Suicidal Crisis</b> (Singer, 2006, p.236)	
<b>Area</b>	<b>Key questions</b>
<i>Assessment</i>	
Attempt	What method was employed, how lethal, and how much planning was involved?
Ideator	Did you ever feel so upset that you wished you were not alive or wanted to die? Did you ever do something that you knew was so dangerous that you could get hurt or killed by doing it? Did you ever think about or try to commit suicide? (Jacobson, 1994, as cited in Shaffer & Pfeffer, 2001, p. 37S).
Underlying conditions	Do you have an existing diagnosis?
Risk factors for repeated suicide attempt	See Table 2
Protective factors	What part of you wants to stay alive? What has kept you from killing yourself up to this point?
Parent/guardian	Are you able to maintain a safe environment?
<i>Intervention</i>	
Negotiate no-harm contract	What can you do other than kill yourself? Who can you call? What can I do?
Limit availability of lethal means	What lethal means are available? Are they accessible? How can they be secured or removed?
Provide support and 24-hr contact	What number should you call in a crisis?
Hospitalize if necessary	Are you able to keep yourself safe in the community?
Refer to psychiatrist for an evaluation for medications	Are you currently seeing a psychiatrist?
<i>Other</i>	
Supervision and consultation	Are there any areas of my assessment, diagnosis or treatment plan that are incomplete and therefore fail to protect my client?
Documentation	Based on my documentation, would a lawyer and jury understand how the client presented, what I did and why I did it?

**Checklist for Assessing Child or Adolescent Suicide Attempters  
in an Emergency Room or Crisis Center**

(Schaffer & Pfeffer, 2001, p. 26S)

**Attempters at Greatest Risk for Suicide**

Suicidal history

- ✓ Still thinking of suicide
- ✓ Have made a prior suicide attempt

Demographics

- ✓ Male
- ✓ Lives alone

Mental state

- ✓ Depressed, manic, hypomanic, severely anxious, or have a mixture of these states
- ✓ Substance abuse alone or in association with a mood disorder
- ✓ Irritable, agitated, threatening violence to others, delusional, or hallucinating

➔ **Do not discharge such patients without psychiatric evaluation.**

**Look for signs of clinical depression**

- ✓ Depressed mood most of the time
- ✓ Loss of interest or pleasure in usual activities
- ✓ Weight loss or gain
- ✓ Can't sleep or sleeps too much
- ✓ Restless or slowed-down
- ✓ Fatigue, loss of energy
- ✓ Feels worthless or guilty
- ✓ Low self-esteem, disappointed with self
- ✓ Feels hopeless about future
- ✓ Can't concentrate, indecisive
- ✓ Recurring thoughts of death
- ✓ Irritable, upset by little things

**Look for signs of mania or hypomania**

- ✓ Depressed mood most of the time
- ✓ Elated, expansive, or irritable mood
- ✓ Inflated self-esteem, grandiosity
- ✓ Decreased need for sleep
- ✓ More talkative than usual, pressured speech
- ✓ Racing thoughts
- ✓ Abrupt topic changes when talking
- ✓ Distractible
- ✓ Excessive participation in multiple activities
- ✓ Agitated or restless
- ✓ Hypersexual, spends foolishly, uninhibited remarks

**Checklist Before Discharging an Adolescent Who Has Attempted Suicide**

(Shaffer & Pfeffer, 2001, 40S)

Before discharging a patient from the ER or crisis center, always:

- Caution patient and family about disinhibiting effects of drugs or alcohol
- Check that *firearms* and lethal *medications* can be effectively secured or removed
- Check that there is a *supportive person* at home
- Check that a *follow-up appointment* has been scheduled

## **Appendix B. MEDIA GUIDELINES**

*Adapted from CDC (1994), Suicide Contagion and the Reporting of Suicide.*

- Professional care providers should realize that efforts to prevent news coverage may not be effective. Thus their goal should be to assist news professionals in their efforts toward responsible and accurate reporting.
- “No comment” is not a productive response to media representatives since it does not prevent coverage but precludes an opportunity to influence what and how will be reported. While professionals should not feel obligated to provide immediate answers they should be prepared to provide answers within a reasonable timeframe. Answers should be carefully considered. Impromptu comments can result in harmful news coverage.
- All parties should understand that there scientific evidence for the concern that certain types of news coverage of suicide can contribute to the further suicides (“contagion”). Though not trying to tell reporters what to report or how to write, officials must take the time to explain this scientific basis and how the potential for contagion can be reduced by responsible reporting.

Characteristics of media coverage that can contribute to contagion for at-risk persons include

- Presenting simplistic explanations for suicide rather than mentioning the complex interaction of many factors and history of psychosocial problems typically preceding a suicide.
- Repetitive, ongoing, or excessive reporting of suicide tends to promote and maintain a preoccupation with suicide among at-risk persons.
- Sensational coverage of suicide heightens the general public's preoccupation with suicide. Media can help minimize sensationalism by limiting, as much as possible, morbid details, decrease the prominence of the news report and avoid the use of dramatic photographs related to the suicide (e.g., photographs of the funeral, the deceased person's bedroom, and the site of the suicide).
- Reporting "how-to" descriptions of suicide, i.e. describing technical details about the method is undesirable because it may facilitate imitation.
- Presenting suicide as a tool for accomplishing certain ends may suggest suicide as a potential coping mechanism to at-risk persons.
- Glorifying suicide or persons who commit suicide may contribute to suicide contagion by suggesting that society is honoring the suicidal behavior of the deceased person, rather than mourning the person's death. Thus coverage of community expressions of grief (e.g., public eulogies, flying flags at half-mast, and erecting permanent public memorials) best be minimized.
- Focusing on the suicide completer's positive characteristics without acknowledging his/her troubles may make suicide appear like an attractive behavior rewarded by laudatory responses.

## Appendix C: RESOURCES

A variety of organizations provide critical resources on the topics of suicide, and suicide prevention for young people. Among those are:

The *American Association of Suicidology* (AAS; [www.suicidology.org](http://www.suicidology.org)) is a non-profit organization that serves as a national clearinghouse for information on suicide, promoting research, public awareness, public education, and training to understand and prevent suicide. AAS hosts three annual conferences, and publishes a peer-reviewed journal *Suicide and Life-Threatening Behaviors* as well as factsheets, newsletters, and directories.

The *Centers for Disease Control and Prevention* (CDC; [www.cdc.gov](http://www.cdc.gov)): the National Center for Injury Prevention and Control which compiles statistical data on their Web-based Injury Statistics Query and Reporting System (WISQARS) ([www.cdc.gov/ncipc/wisqars](http://www.cdc.gov/ncipc/wisqars))

The *Suicide Prevention Resource Center* (SPRC; [www.sprc.org](http://www.sprc.org)) was founded in 2002 in an effort to implement recommendations made by the U.S. Department of Health and Human Services in their “National Strategy for Suicide Prevention” (2001). Supported by the Substance Abuse and Mental Health Services Administration (SAMHSA) and operated by Health and Human Development Programs at Education Development Center, the Suicide Prevention Resource Center offers support, training, and resources to assist organizations and individuals who wish to develop suicide prevention programs, interventions and policies.

The *American Foundation for Suicide Prevention* (AFSP; [www.afsp.org](http://www.afsp.org)) is a national not-for-profit organization established in 1987 and dedicated to understanding and preventing suicide through research, education, and outreach.

The *American Academy of Child and Adolescent Psychiatry* (AACAP, [www.aacap.org](http://www.aacap.org))

These known risk and protective factors guide clinicians’ assessments and interventions. Assessment information should be elicited from several sources, (the child or adolescent, parents, schools, etc.) and authors recommend the use of semi-structured clinical interviews and self-administered questionnaires. As Shaffer and Pfeffer (2001) point out, “Structured or semistructured suicide scale questionnaires, whether delivered by the clinician or self-completed by the child or adolescent, have limited predictive value. They may complement but should never take the place of a thorough assessment or substitute for any aspect of assessment.” (p. 26S)

Appendix D. Matrix of Selected Literature

Article	Type of Publication	Key Components	Main Conclusions
Aseltine, R.H. (2003). An Evaluation of a School Based Suicide Prevention Program, <i>Adolescent-and-Family-Health</i> , 3 (2), 81-88.	Study of Implementation and initial outcomes	<b>Sample:</b> primary contact person at 92 schools <b>Measure:</b> survey re. Implementation (number and type of students, student reactions, effects on help seeking) <b>Program:</b> see below	<b>Results</b> indicate that contact staff reported positive effects on help seeking, positive evaluation of program overall, and no indications of negative. Iatrogenic effects.
Aseltine R.H., James, A., Schilling, E. A. & Glanovsky, J. (2007). Evaluating the SOS suicide prevention program: a replication and extension, <i>BMC Public Health</i> , 7, 161 – 168.	Experimental study involving 4133 students in 9 high schools in three states.	<b>Sample:</b> 50% Male, 35% Hispanic or Latino, 25% White, 24% Black or African American <b>Measure:</b> adapted questionnaire (see below) three months post tx. <b>Program:</b> see below	<b>Results</b> confirm earlier study and show significantly lower rates of suicide attempts, and greater knowledge and more adaptive attitudes about depression and for students in the intervention group independent of race/ethnicity, grade, and gender. No effect was found for help seeking which held true for youth from different socioeconomic backgrounds. <b>Limitations:</b> no longer term follow up data, no pretest data.
Aseltine, R.H., & DeMartino, R. (2004). An Outcome Evaluation of the SOS Suicide Prevention Program, <i>American Journal of Public Health</i> , 94 (3), 446-451.	Experimental study of 2,200 students ages 14-18 in five different high schools	<b>Sample:</b> ethnicity varied between schools, involved significant numbers of white, Hispanic and African-American youth, and close to 50:50 gender balance. <b>Measures</b> compared 3 months after program: questionnaire re. Self-reported suicide attempts and ideation over past 3 months, knowledge and attitudes about depression and suicide, and help seeking behaviors. <b>Program:</b> Curriculum based education involving video and teacher led discussion plus questionnaire to screen youth for depression and suicide risk. Referral if needed.	<b>Results</b> showed that program participants were approximately 40% less likely to report suicide attempts in the past 3 months than the control group, lower (but not statistically significant suicide ideation), modest effects on knowledge and attitudes, but not for help seeking behaviors. Consistent with other research, girls showed higher knowledge as well as more adaptive attitudes and help seeking behaviors. <b>Limitations:</b> no longer term follow up data, no pretest data.
Chagnon, F., Houle, J., Marcoux, I., & Renaud, J. (2007). Control-group study of an intervention training program for youth suicide prevention, <i>Suicide-and-Life-Threatening-Behavior</i> , 37 (2), 135-144.	Experimental study of gatekeeper training program for 71 (n) professionals	<b>Sample:</b> 65% female, majority with college degrees, working in education or, community services. <b>Measures/outcome:</b> attitudes, knowledge and skills recorded pre-intervention, post intervention and at 6 months follow up <b>Program:</b> 3 day training (1 day/week) lectures and role plays to crease screening, intervention, referral skills.	<b>Results</b> show statistically significant increases in knowledge, attitudes and skills for experimental group which were maintained at 6 months follow up. Still knowledge scores were still relatively low for participants after the program leading authors to wonder if longer term training may further increase effectiveness. <b>Limitations</b> follow up only short term, small sample size.
Ciffone, J. (2007). Suicide prevention: an analysis and replication of a curriculum-based high school program, <i>Social-Work</i> 52 (1), 41-49.	experimental study of 421 (n) students assigned to SEHS program or control group (regular health class)	<b>Sample:</b> 10 <sup>th</sup> graders in two schools, 53% female <b>Measures:</b> attitudes; three weeks after 3-day curriculum <b>Program:</b> South Elgin High School (SEHS) aims to change attitudes by reducing the presumption that suicide is a “normal” response to stress, and reducing the stigma of mental illness. In its entirety it consists of staff polices, freshman orientation, on site social worker, structured discussions about depression (10 <sup>th</sup> gr), prevention information, screening, intervention for at-risk youth, postvention. Assessed here were program components offered to 10 <sup>th</sup> graders.	Replicating an earlier study, <b>results</b> show significant improvements of attitudes about suicide independent of school, gender, or presenter.  Based on literature authors recommend the implementation of a ell-designed curriculum based program (that emphasizes suicide as being linked to treatable mental disorders) followed by a screening.  <b>Limitation:</b> It remains unclear to what extent changes in attitudes correlate to changes in behaviors, only short term effects were measured.

Appendix D. Matrix of Selected Literature

<p>Conner, K.R., &amp; Goldston, D.B. (2007). Rates of suicide among males increase steadily from age 11 to 21: Developmental framework and outline for prevention, <i>Aggression and Violent Behavior</i>, 12 (2), 193-207.</p>	<p>Conceptual article</p>	<p>Based on a review</p> <ul style="list-style-type: none"> <li>• explanations for the steady age-related increase of suicides among male youth from ages 11 to 21 are offered</li> <li>• developmental aspects</li> <li>• recommendations</li> </ul>	<p>Depression and substance use disorders are major contributors to the age-related pattern in suicide and increased capacity for serious acts of aggression with age also contributes. Suicides among young males are marking the endpoint of the interplay of psychopathology and developmental difficulties. Recommendations emphasize strategies to interrupt cycles of depression and/or substance abuse and developmental failure, plus means restriction.</p>
<p>Coggan, C., &amp; Patterson, P. (1998). Focus groups with youth to enhance knowledge of ways to address youth suicide, in Kosky, Eshkevari, Goldney, and Riaz (Eds.) <i>Suicide prevention: The global context</i>, New York, NY, US: Plenum Press, pp. 259-268.</p>	<p>Book chapter describing focus group research with 140 (N) youth to enhance knowledge or ways to address suicide.</p>	<p>Main themes</p> <ul style="list-style-type: none"> <li>• Pressures faced by young people</li> <li>• Suicide :is it an Issue for Young People?</li> <li>• Barriers to Utilizing Existing Services/Resource</li> <li>• Potential Youth Suicide Prevention Strategies</li> </ul>	<p><b>Pressures:</b> groups found that overall emotional pressures arose from the interaction of the many situations faced by young people.  <b>Suicide:</b> Three themes emerged 1) risk taking behaviors, 2) unusual actions and 3) personality changes  <b>Barriers:</b> Complete lack of knowledge of where they could turn to in a crises. Young adulthood was often a difficult times for family dynamics and created a barrier to utilizing the resources. Friends report a negative experience about the resources. Another barrier was that, there was an overall feeling that health professionals are too impersonal, too expensive and took too long to get involved.  <b>Prevention:</b> <i>Information initiatives</i>; posters, billboards, media, at school. <i>Education sector initiatives</i> (youth need groups or clubs that can help young people feel better about themselves); <i>health sector initiatives</i>; <i>legislation issues</i> (young people did not believe that they were considered important in the policies).</p>
<p>Diamond, G. M., Jurgensen, E., &amp; White, K. (2007). Adapting Attachment-Based Family Therapy for Depressed and Suicidal Gay, Lesbian, and Bisexual Adolescents. <i>Focal Point</i>, 21 (2), 16-18.</p>	<p>Program description</p>	<p>Attachment-Based Family Therapy (ABFT) components five treatment tasks</p> <p>Brief summary of pilot study, Sample included one third with minority sexual orientation.</p> <p>Current project: adaptation to GBL population</p>	<p>ABFT is a manualized, empirically-based family treatment specifically designed to ameliorate depression and suicidal ideation among adolescents aim is to improve the quality of the adolescent-parent attachment relationship. Five treatment tasks:</p> <ol style="list-style-type: none"> <li>1. relational reframe toward positive descriptions</li> <li>2. alliance building and exploration with adolescent, and separately</li> <li>3. alliance building and exploration with parents</li> <li>4. Reattachment episodes are designed to facilitate conversations</li> <li>5. promoting competency, designed to help parents help youth</li> </ol> <p>Pilot randomized clinical trial comparing 12 weeks of ABFT to a wait-list control condition, found 81% of ABFT cases no longer met criteria for Major Depressive Disorder post-treatment, compared to 47% of the control group. Currently under way: project spanning three years and two stages. Stage one is to adapt the current ABFT manual to include the specific content, tasks, and therapeutic strategies for GBL youth and their families, stage two involves conducting a pilot randomized clinical trial.</p>
<p>Eckert, T.L., Miller, D.N., Riley-Tillman, T.C., &amp; DuPaul, G.J. (2006). Adolescent suicide prevention: Gender differences</p>	<p>Survey Study of 662 (n) college freshmen rating the relative</p>	<p><b>Sample:</b> majority female</p> <p><b>Measures:</b> acceptability, intrusiveness, and time demands</p>	<p><b>Results</b> showed that though a majority (85.9%) of the sample agreed that adolescent suicide was a significant problem, significant gender differences were observed. Women rated the curriculum-based program and staff in-service training as more acceptable than male participants,</p>

Appendix D. Matrix of Selected Literature

<p>in students' perceptions of the acceptability and intrusiveness of school-based screening programs, <i>Journal of School Psychology</i>, 44 (4), 271-285.</p>	<p>acceptability of curriculum programs, staff in-service training, and school-wide screening among older adolescents</p>		<p>and rated the curriculum-based program significantly less intrusive and less time demanding than male participants. Authors conclude that adolescent males, who are most likely to commit suicide, may find staff in-service and curriculum-based programs to be the least beneficial and acceptable. As a result, males may be less likely to actively participate in and benefit from curriculum-based programs. School-wide screenings or alternative methods of screening for suicidal behaviors may need to be developed for males. Conversely, staff in-service training and curriculum-based programs may be more viable among high school females, who attempt suicide at a higher rate than adolescent males. Future researchers may have to give greater prominence to examining gender issues when developing these types of programs.</p>
<p>Esposito Smythers, C., Spirito, A., Uth, R., &amp; LaChance, H. (2006). Cognitive Behavioral Treatment for Suicidal Alcohol Abusing Adolescents: Development and Pilot Testing, <i>The-American-Journal-on-Addictions</i>, 15 (Suppl1), 126-130.</p>	<p>Pilot study using pre-post measures of 6 (n) suicidal youth (ages 14-16) with SA problems</p>	<p><b>Sample:</b> 5 females, 1 male, 4 with Suicide attempts, 2 with ideation, most referred from inpatient unit  <b>Measures:</b> affective disorders, substance use, suicidality, treatment acceptability/feasibility, working alliance, retention  <b>Program:</b> CBT combining skill training for suicidal youth and skills for substance abusers, individual (60 min) family treatment (60-90) and case management as needed. Three phases include acute (motivation interview, and six months of individual weekly tx); maintenance (three months of bi-weekly sessions); booster (three monthly sessions)</p>	<p><b>Results</b> overall support the approach: five youth completed treatment, all had good alliance scores, all received concurrent medication treatment, all reported reductions in suicidal ideation after six and 12 months, although 2 re-attempted suicide and received hospital treatment for overdoses. At 6 months, four reported reduction in substance use, at 12 months all five reported reduced use.</p> <p><b>Limitations:</b> small, non-experimental</p>
<p>Esposito-Smythers, C., McClung, T.J., &amp; Fairlie, A.M. (2006). Adolescent Perceptions of a Suicide Prevention Group on an Inpatient Unit, <i>Archives-of-Suicide-Research</i>, 10 (3), 265-275.</p>	<p>Analysis of archival survey data for 250 (n) inpatient youth (ages 12-18 ) who participated in psycho-educational group</p>	<p><b>Sample:</b> majority female, 95% Caucasian, 68% with recent suicide attempt, virtually all with ideation,  <b>Measures:</b> open ended survey about what was helpful  <b>Program</b> 60-minute groups (2-6 participants) included education on myths, identifying triggers and coping strategies including "list of reasons to live" and "safety list"</p>	<p><b>Results</b> Overall, the group was deemed useful as 94% indicated they learned something that would help keep them from suicide, 7% felt the group made them feel suicidal. Particularly endorsed was the "reasons to live" list. 49% of youth perceived the "list of reasons to live" as most helpful whereas 30% identified the "safety list" as least helpful. The identification of triggers seemed to be an activity most often perceived as "making youth feel suicidal". Authors suggest that more general discussion of triggers (instead of personal ones) could alleviate the effects. In addition, youth with histories of previous suicide attempts were less likely to find "everything" about the program helpful, and instead more likely to feel positive about being in a group of people with similar experiences (universality).</p>
<p>Fortune, S.A. &amp; Hawton, K. (2005). Deliberate self-harm in children and adolescents: A research update, <i>Current Opinion in Psychiatry</i>, 18 (4), 401-406.</p>	<p>Review of research published 2004-2005</p>	<p>risk and protective factors  SSRIs,  cognitive behaviour therapy (CBT), dialectical behaviour therapy (DBT)  multisystemic therapy (MST), barriers to help seeking, Internet and prevention.</p>	<p>A strong and direct association exists between suicide attempts and both childhood, sexual abuse and physical abuse. Girls appear to suffer particularly when parent-child relationships are poor. Associated with risk: disengagement, avoidance, withdrawal, impulsivity, risk taking. 90% of suicides are associated with mental disorders, most prominently depression and substance abuse. Gay and lesbian youth, and those exposed to peer suicide seem at increased risk. Little research on protective factors.  SSRIs: Findings and recommendations are conflicting.</p>

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			<p>CBT: has only recently begun to be researched as to effects on self-harm. Findings indicate that CBT plus fluoxetine is most effective and more so than CBT or fluoxetine alone. Fluoxetine alone was superior to CBT alone.</p> <p>DBT: has been tested in inpatient population and has shown favorable results as did MST in a residential facility.</p> <p>Nondirective approaches seem less effective, and overall little is known about how to successfully engage suicidal, depressed youth. Few youth seek help themselves, males even less so but tend to isolate themselves or at best turn to peers.</p> <p>Among prevention programs: Signs of Suicide (SOS) showed a modest impact, and case finding strategies may be promising though difficult to implement.</p>
Fullagar, S. (2003). Wasted lives: The social dynamics of shame and youth suicide, <i>Journal-of-Sociology</i> , 39 (3), 291-307.	Qualitative constructivist analysis of interviews with 41 youth in Australia	<p><b>Sample:</b> from different socio-economic location, employment status, gender, geographic location and ages (15–24), although the majority were of Anglo-European descent.</p> <p><b>Method:</b> 10 open-ended questions relating to the reasons behind suicide</p>	Analysis found that cultural vocabulary of waste and value figures in the metaphors and stories of young people shame plays a predominant role in suicidal experiences and the everyday social relations that govern the expression of emotion. The author argues for the necessity of understanding the social dynamics of shame in the accounts and worlds of young people. Taking issue with constructions of suicidality as a calculation of risk and protective factors, the author stresses the intersubjectivity and relational nature of feeling shame and humiliation which often underlies suicide.
Gair, S., & Camilleri, P. (2003). Attempting suicide and help-seeking behaviours: using stories from young people to inform social work practice, <i>Australian-Social-Work</i> , 56 (2): 83-92.	Qualitative study with 9 (n) Australian youth ages 16-24 about events leading to suicide attempt and help-seeking behaviors	<p><b>Sample:</b> 5 girls, 4 boys, two indigenous</p> <p><b>Method:</b> in-depth individual interviews, semi structured</p>	<b>Results</b> indicate that paths to suicide attempt were either described as a cumulative progression, or a more impulsive act. Participants described using as means for their attempt overdose of drugs, hanging, attempting to jump before a moving object, and use of weapons. No clear gender differences were evident in the choice of means but more females reported multiple attempts to take their lives. Participants distinguished the unique nature of individual attempts as more or less serious. Thus, not all attempts are described as having the same intent. In terms of help seeking, youth spoke of actively seeking help by reaching out to family, significant others, school counselors and local community based services, feeling reluctant to ask for help, doubting the benefits of help and betrayal of helpers. Barriers to help seeking included traditional male gender roles, and distrust in professionals ability to help. Youth suggested that useful assistance could include education in schools about depression and suicidality, active and flexible outreach to build relationships early, and informal friendship ('mate') roles by workers.
Goldney, R.D. (2005). Suicide Prevention: A Pragmatic Review of Recent Studies. <i>Crisis: The Journal of Crisis Intervention and Suicide Prevention</i> , 26 (3), 128-140	Selective review (pragmatic, rather than systematic) of the literature	Review of national and international literature (mostly focusing on adults) limitations of empirical evidence approach for this field nonpharmacological pharmacological	Nonpharmacological: some studies support telephone helplines, befriending, enhanced contact after suicide attempts, Linehan's DBT model for Borderline diagnoses, reduced media coverage, means restriction (smaller package sizes for paracetamol and other potentially toxic substances, firearms control, safety barriers for high structures. Pharmacological: antidepressants, mood stabilizers, antipsychotic

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			(neuroleptic) meds.
Gould, M. S, Greenberg, T., Munfakh, J.L., Kleinman, M., & Lubell, K. (2006). Teenagers' Attitudes about Seeking Help from Telephone Crisis Services (Hotlines), <i>Suicide-and-Life-Threatening-Behavior</i> , 36 (6), 601-613.	Study examining the attitudes toward use of helplines of 519 (n) adolescents (age 13-19) in mandatory health classes	<b>Sample</b> 78% Caucasian, 13% Hispanic, 3% African American; 50% female  <b>Outcomes/Measures</b> Beck Hopelessness Scale Columbia Impairment Scale Help-seeking questionnaire	<b>Results</b> indicate that very few adolescents ever use telephone hotlines (2.1%) even though virtually all were aware of their existence. Negative attitudes toward use of hotlines were higher than for other sources of help. The most often cited reasons for not using or wanting to use hotlines were self reliance (such as seeking help elsewhere, not feeling like needing help etc.) and shame. In addition, objections to hotlines were highest in youth who seemed to have the highest needs. Female generally indicated more positive attitudes toward help seeking, including hotlines. Authors suggest that the Internet may be a more easily utilized source of help than phone services.
Gould, M.S., Greenberg, T., Velting, D.M., & Shaffer, D. (2003). Youth suicide risk and preventive interventions: a review of the past 10 years, <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 42 (4), 386-405.	Review of empirical literature from 1992-2002-	epidemiology, risk factors, prevention strategies, treatment	The authors find the increased prescription of antidepressant medication to be the most plausible explanation for the marked decline of youth suicide rates in the past ten years. Key risk factors include: youth psychiatric disorder (90% had at least one major psychiatric disorder, most often depressive disorder – rates are lower for younger teens). Affective disorders are more common among female victims. Discrepant results have been reported for bipolar disorder. Substance abuse is another key risk factor, as is a family history of suicide and psychopathology, stressful life events, and access to firearms. Prior attempts, poor problem-solving, aggressive/ impulsive behaviors have been found to be risk factors. Protective factors conversely include greater family cohesion and religiosity. Promising prevention strategies include school-based skills training for students, screening for at-risk youths, education of primary care physicians, media education, and lethal-means restriction, but all need continuing evaluation research. Dialectical behavior therapy, cognitive-behavioral therapy, and treatment with antidepressants have been identified as promising treatments but have not yet been tested in a randomized clinical trial of youth suicide.
Gould, M.S., Marrocco, F. A., Kleinman, M., Thomas, J.G., Mostkoff, K., Cote, J. & Davies, M. (2005). Evaluating Iatrogenic Risk of Youth Suicide Screening Programs: A Randomized Controlled Trial, <i>Journal-of-the-American-Medical-Association</i> , 293 (13), 1635-1643.	A randomized controlled study of a 2-day screening for 2342 students age 13-19 in New York State in 2002-2004, comparing high-risk and general populations.	<b>Sample:</b> mean age 14, 80% Caucasian, 7 % Hispanic, 5% African-American; 58% male. <b>Measures:</b> distress, suicidal ideation <b>Experimental Intervention:</b> Beck depression inventory with suicidal ideation questions, Suicide attempt questionnaire, suicide ideation questionnaire.	<b>Results</b> indicated no difference in distress between experimental and control groups immediately after the first survey or 2 days later nor in rates of depressive feelings, likelihood of reporting suicidal ideation. High-risk students (defined as those with depression symptoms, substance use problems, or any previous suicide attempt) in the experimental group were neither more suicidal nor distressed than high-risk youth in the control group. On the contrary, depressed students and previous suicide attempters in the experimental group appeared less distressed (P = .01) and suicidal (P = .02), respectively, than high-risk control students. The authors conclude that there is no evidence of iatrogenic effects of suicide screening emerged. Screening in high schools is a safe component of youth suicide prevention efforts.
Grossman, J., Dontes, A., Kruesi, M.J.P., Pennington, J., & Fendrich, M. (2003). Emergency	Survey study of 527 (N) ER nurses in Illinois	<b>Sample</b> majority working in urban or suburban, private hospital. No other demographic information given. <b>Survey</b> re. training, knowledge, practice, and attitudes	<b>Findings</b> indicate that the majority (80%) of respondents had recent experience with suicidal adolescents, but only 24% had ever received means restriction training. 28% provided means restriction education to

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nurses' responses to a survey about means restriction: An adolescent suicide prevention strategy, <i>Journal-of-the-American-Psychiatric-Nurses-Association</i> , 9 (3), 77-85.	about experiences with suicidal adolescents	toward means restriction; unit practice related to the delivery of means restriction education to parents	parents, and 18% worked in units where means restriction is standard practice. Authors recommend training ER staff in means restriction, adopting protocol for adolescents at risk for suicide, and conducting outcome studies.
Gutierrez, P.M., Watkins, R., & Collura, D. (2004). Suicide Risk Screening in an Urban High School, <i>Suicide-and-Life-Threatening-Behavior</i> , 34 (4), 421-428.	Description of screening and referral/intervention procedures from 350 (n) urban high students ages 13-19,	<b>Sample:</b> 55% female, 62 % Caucasian, 15% African American, 7.7% Hispanic  <b>Measures:</b> Suicidal Ideation, Reynolds Depression Scale.  <b>Program:</b> Screening with follow up for youth identified as having needs.	Although the screening component was originally meant only as a small part of a larger program effort, it appeared to have immediate effects on school practices: Results of the screening indicated that about 11% - 20% of students who participated in the screening were deemed as requiring some sort of follow-up or intervention. After referral to a psychologist for a more in-depth interview, all students thought of as having apparent needs, clear concerns, or being at risk agreed to and received some type of service matched to their category of need (monitoring, intermediate, or intensive). Teachers' awareness of risks, and readiness to refer youth seemed to increase. The authors point out that screening efforts must thus be combined with sufficient and appropriate resources for referral and treatment services.
Hallfors, D., Brodish, P.H., Khatapoush, S., Sanchez, V., Cho, H., & Sleekier, A. (2006). Feasibility of Screening Adolescents for Suicide Risk in "Real-World" High School Settings, <i>American-Journal-of-Public-Health</i> , 96 (2), 282-287.	Study of the feasibility of Suicide Risk Screening of 1323 (n) students in 10 high schools.	<b>Sample</b> very diverse.  <b>Measures:</b> Screening results, student follow-up, staff feedback, and school responses	<b>Results</b> supported the need to test the feasibility of a given screening effort. Here, 29% of participants were considered at risk. As a result of this overwhelming percentage, school staffs chose to discontinue the screening after 2 semesters. In further analyses, about half of the students identified were deemed at high risk on the basis of high levels of depression, suicidal ideation, or suicidal behavior. Priority rankings evidenced good construct validity on correlates such as drug use, hopelessness, and perceived family support. A simpler, more specific screening instrument than the Suicide Risk Screen would identify approximately 11% of urban high school youths for assessment, offering high school officials an important opportunity to identify young people at the greatest levels of need and to target scarce health resources.
Hennig, C.W., Crabtree, C.R., & Baum, D. (1998). Mental health CPR: Peer contracting as a response to potential suicide in adolescents, <i>Archives-of-Suicide-Research</i> , 4 (2), 169-187.	Quasi-experimental study of 396 (n) High school youth exposed to mental health CPR program	<b>Sample:</b> 57% male, 66% white in 19 health classes <b>Measures:</b> a test questionnaire after program and 7 weeks later, with 21 items about how to intervene with peers at risk of suicide, knowledge and attitudes about suicide. <b>Program:</b> Mental Health CPR (no-harm agreement) training curriculum, 90 minute class addressing primarily nonsuicidal individuals who may come in contact with an at-risk person, intervention intends to establish a no harm agreement to delay suicidal activity until assistance can be obtained. Curriculum contains discussion of common myths and relevant facts.	<b>Results</b> show that program participants were significantly more likely to ask if a friend was having suicidal thoughts. This trend persisted 7 weeks later but was no longer statistically significant. Participants were also significantly more likely, both immediately after and at seven weeks later, to ask an at risk individual to avoid self-harm until professional help could be obtained, and more likely to respond correctly (call 911 and send an ambulance) when a friend told them that he/she was attempting suicide. However, this latter difference did not persist at seven weeks after training. Training also affected positive results on knowledge and beliefs about suicide (with the exception of understanding mental illness as a major factor in suicide).
Kalafat, J. & Ryerson, D.M. (1999). The implementation and institutionalization of a school-	Survey and qualitative interview study	<b>Sample:</b> High School staff in 46 schools <b>Measures:</b> survey re. implementation and institutionalization of ASAP program, in-depth interview	<b>Results</b> indicate that the vast majority of school retained the program in some form. Most had reduced the time allotted, and folded the stand-alone program into existing classes to allow for better scheduling.

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<p>based youth suicide prevention program, <i>Journal of Primary Prevention</i>, 19 (3), 157-175.</p>	<p>ten years after implementation of a county wide suicide prevention effort in 46 (n) public high schools</p>	<p>with 11 participants from those 11 schools which were the first to implement the program <b>Program:</b> ASAP is a universal prevention effort developed by community MHC in collaboration with educators. It includes: Administrative/organizational consultation; linkages with community gatekeepers; training component for <i>all</i> school personnel (teachers, support staff, cafeteria workers, bus drivers, etc.); parents' training component; student lessons.</p>	<p>Successful retention of the program was associated with supportive administrators and continuity of key staff teaching the program. Schools felt free to adapt and change program content over time, for instance reacting to new morbidity findings (such as substance abuse etc.). State and county data for the time periods before, during and after program implementation show significant reductions in suicide for youth ages 15-24. While it is not possible to claim that this trend is caused by the program, authors found data encouraging.</p>
<p>Kalafat, J. (2003). School approaches to youth suicide prevention, <i>American Behavioral Scientist. Special Issue: Suicide in Youth</i>, 46 (9), 1211-1223.</p>	<p>Review of school based prevention programs</p>	<p>Protective factors universal selected (none available) indicated programs</p>	<p><b>Protective factors</b> include</p> <ul style="list-style-type: none"> <li>• personal characteristics such as positive disposition and problem-solving ability;</li> <li>• contact with caring adults; and</li> <li>• a sense of connection with school, family, and community based on opportunities to participate and make contributions.</li> </ul> <p><b>Universal:</b> designed to increase the ability to respond appropriately for school gatekeepers (administrators, faculty, and staff) and peers, implementation includes administrative consultation, gatekeeper training, parent training, community gatekeeper training, student classes.</p> <p><b>Indicated:</b> Examples: for at-risk youth Reconnecting Youth uses a partnership model involving peers, school personnel, and parents to deliver interventions that are organized into four components, including school bonding activities, parent involvement, school crisis-response planning. Although somewhat mixed, evaluations showed that brief indicated intervention consisting of a risk assessment, crisis intervention, and enhanced connection with caring adults was sufficient for affecting short-term attitudes and ideation. <b>Approaches that are counterindicated</b> are one-time efforts (like assemblies); media depictions of suicidal behavior or presentations by youth who have made suicide attempts, outsourcing programming without making use of local school expertise, or restriction to any single approach or strategy (such as annual screenings only). Necessary to dispel are myths of suicide prevention programs supposedly increasing the likelihood of suicide (giving kids the idea). The authors <b>conclude</b> that “although there is some initial empirical support for these programs, more systematic evaluation needs to be done that assesses implementation fidelity and the relationships among hypothesized mediating variables (e.g., sense of connection to the school community), moderating variables (e.g., degree of coordination between schools and communities), proximal outcomes (e.g., knowledge and attitudes), and distal outcomes (suicide rates). Some carefully designed and implemented programs that have demonstrated sustainability in schools have reached an evaluable level and are candidates for systematic evaluation of their processes and outcomes. This iterative process of</p>

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			program development and evaluation is required to fulfill the promise of school-based suicide prevention approaches.” (p. 1220)
King, C. A., Kramer, A., Preuss, L., Kerr, D.C. R., Weisse, L., & Venkataraman, S. (2006). Youth-Nominated Support Team for Suicidal Adolescents (Version 1): A Randomized Controlled Trial, <i>Journal of Consulting and Clinical Psychology, 74</i> (1), 199-206.	Experimental study involving 289 (n) suicidal youth (12–17 years) in experimental vs. treatment as usual	<b>Sample:</b> 68% girls, 82% Caucasian following psychiatric hospitalization <b>Measures</b> pre and 6 months post intervention: Suicidal Ideation Questionnaire (SIQ–JR), Spectrum of Suicide Behavior Scale, Youth Self report, Reynolds Depression Scale, CAFAS <b>Program:</b> Youth Nominated Support (YST-1), a psychoeducational social network intervention in which youth nominate up to 4 support people in addition to parents. Support persons participate in psychoeducation sessions (1.5–2.0 hr), maintain weekly supportive contact to youth and are regularly contacted by staff.	<b>Results</b> showed no main effects on suicide ideation or attempts, internalizing symptoms, or related functional impairment. Modest to moderate effects were found for gender: Relative to other girls, those who received YST–1 reported greater decreases in self-reported suicidal ideation and significantly greater decreases in mood-related functional impairment reported by their parents.
King, K. A. (2001). Developing a Comprehensive School Suicide Prevention Program, <i>Journal of School Health, 71</i> (4), 132-137.	Conceptual article	prevention methods primary (prevention), secondary (intervention) and tertiary (postvention)	Recommends comprehensive approach to school prevention. Primary prevention: <ul style="list-style-type: none"> <li>• School wide policy</li> <li>• teacher training re. signs and risk factors</li> <li>• collaboration between school staff</li> <li>• including suicide prevention in curriculum</li> <li>• peer assisted programs</li> <li>• increasing school connectedness</li> <li>• school family partnership</li> <li>• school community partnership</li> <li>• establish school crisis intervention team</li> </ul> Secondary prevention: student safety assessment, referral, staff debriefing Postvention: prompt response, clear information, etc.
Klomek, A.B., & Stanley, B. (2007). Psychosocial treatment of depression and suicidality in adolescents, <i>CNS-Spectrums, 12</i> (2), 135-144.	Review of treatments for depression and suicidality	empirically validated treatments for depression in youth treatments for suicidal youth	There are only two evidence-based tx for depression in adolescents, and tx for suicidal youth are still being developed. The most promising results thus far can be found in trials of dialectical behavior therapy adapted for adolescents (DBT-A), the Youth nominated support team (YST). TASA (treatment of adolescent suicide attempters), a NIMH initiative which combines antidepressants and components of CBT, DBT, and family therapy is currently under study but no results have yet been published.
Macgowan, M. J. (2004). Psychosocial treatment of youth suicide: A systematic review of the research. <i>Research on Social Work Practice, 14</i> , 147–162.	Review of 10 empirical studies intended to reduce suicidal behaviors (e.g., suicide attempts) or suicidal ideation through psychosocial	<b>Samples:</b> mostly samples with a majority of girls (average of 86.5% across the studies), three studies involved mostly Caucasians, another three included a majority of Hispanics or Latinos, and one study mostly African Americans. <b>Interventions:</b> Different approaches were used, but most often short-term (6 months or less) and contained CBT (monitoring and modification	<b>Findings:</b> Of the six studies that assessed suicide attempts or deliberate self-harm, only two reported successful outcomes. Studies that included indirect markers mostly reported successes for all targeted outcomes but in four studies findings indicated no changes in direct markers. No studies included interventions that could be defined as “well established” and only two of the interventions can be deemed “probably efficacious.” <b>Features of the Promising Interventions</b> <ul style="list-style-type: none"> <li>• Consistent with other research, developmental group psychotherapy</li> </ul>

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	interventions for adolescents (age 10-17)	of automatic thoughts, assumptions, and beliefs, acquisition of problem solving, communication, affect regulation, and social skills), most involved youth's families and/or others, some included group components.  <b>Outcomes</b> targeted: direct and indirect markers of suicidality (suicide attempts or suicidal behaviors, ideation, or hopelessness)	was superior to the comparison group in reducing self-harm <ul style="list-style-type: none"> <li>Family communication and problem solving were more likely to reduce suicide ideation but only among a sample without major depression</li> <li>Family interventions did not reduce suicidality among youth with major depression (Researchers speculated that brief five-session may not be sufficient)</li> <li>Short-term, outpatient treatments were effective in reducing suicide attempts or deliberate self-harm</li> <li>Outpatient treatment was an effective alternative to hospitalization in two studies</li> <li>CBT and problem solving were included in many of the interventions that reduced the direct and indirect markers of suicidality.</li> <li>For youth with borderline diagnoses, DBT was helpful in reducing a number of indirect markers of suicidality</li> <li>Short-term interventions that involved families increased youth's compliance</li> </ul>
Murray, B.L. & Wright, K. (2006). Integration of a suicide risk assessment and intervention approach: The perspective of youth, <i>Journal-of-Psychiatric-and-Mental-Health-Nursing</i> , 13 (2), 157-164.	Qualitative study of youth (ages 14-19) perspectives on an integrated assessment and intervention model	<b>Sample:</b> one 19-year-old female and two male participants aged 18 and 14. on average, 1.5–2.5 years had elapsed since their initial suicide assessment interview. <b>Methods:</b> 1 hour qualitative interviews <b>Intervention:</b> Nurse (CNS) delivered model emphasizes a systems approach, encourages engagement and the development of a connectedness with youth and their families, using concepts and language of a Brief Solutions and Family Therapy approach, includes Applied Suicide Intervention Skills Training, assessment, individual and family therapy.	<b>Results</b> show the following three main themes: <b>Change:</b> initial assessment was considered helpful, beneficial, reducing their anxiety, and giving them a sense of getting things under control, leading to change in thinking, other intrapersonal changes and a change in interpersonal relationships. <b>Hope</b> participants spoke how they shifted from a sense of giving up hope to hopefulness, of recognizing their own ability to deal with their problems and issues, and the importance of not feeling alone. <b>Connection</b> Youth highlighted importance of feeling connected to the CNS and the importance of feeling that someone cared about them. The authors conclude that a collaborative, strengths and skill focused approach is important in establishing a positive connection, communicating clearly and in a non-judgmental way, attends to familial and community context, and furthering cooperation.
Olfson, M., Marcus, S.C., & Shaffer, D. (2006). Antidepressant Drug Therapy and Suicide in Severely Depressed Children and Adults, <i>Archives-of-General-Psychiatry</i> , 63 (8), 865-872.	A matched case-control study of Medicaid recipients	<b>Sample:</b> A total of 784 cases with suicide attempts matched to 3635 controls, and a total of 94 cases with completed suicide matched to 435 controls. Adult and child suicide cases were predominantly white, non-Hispanic males, and suicide attempt cases were predominantly white, non-Hispanic females. <b>Measures:</b> suicide attempt or completed suicide, antidepressant use <b>Intervention:</b> antidepressants	<b>Results:</b> In contrast to adults, children and adolescents treated with an antidepressant medication were significantly more likely to attempt suicide and to complete suicide than those who were not treated with antidepressant drugs. Risk of suicide attempts was 1.52 times higher after antidepressant drug treatment. These findings confirm the need for careful clinical monitoring of depressed children and adolescents during the treatment with antidepressants.
Pena, J. B. & Caine, E. D. (2006). Screening as an Approach for Adolescent Suicide Prevention, <i>Suicide-and-Life-</i>	Review of 17 (n) studies on screening or programs containing a	Screening tools indicators of process intermediate indicators Final outcomes	<b>Results</b> show that screening tools can be helpful in identifying youth at risk otherwise overlooked but not all may be reliable especially with more diverse populations. They identify between 10-30% of youth depending on the cutoff scores used. Most of the seven reviewed screening tools were fairly brief and included items regarding suicidal

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<p><i>Threatening-Behavior</i>, 36 (6), 614-637.</p>	<p>screening component</p>		<p>ideation and previous attempts. Some, in addition, assessed depression, anxiety, substance use, hopelessness, self-evaluation, or stress. Because different standards are used for constructing instruments, it is difficult to compare them. The process of implementation requires attention to questions such as: is the instrument suited for the target population and setting?, does it add identification of youth otherwise overlooked?, is there adequate follow up evaluation?, are there adequate resources for treatment?, is the screening a cost effective part of suicide prevention?, and does the screening increase risk for vulnerable youth (no such effect is known)?</p>
<p>Ploeg, J., Ciliska, D., Dobbins, M., Hayward, S., Thomas, H., &amp; Underwood, J. (1996). A systematic overview of adolescent suicide prevention programs, <i>Canadian Journal of Public Health</i>, 87 (5), 319-324.</p>	<p>Review of 11 (n) published and unpublished (1980-1995) curriculum-based programs</p>	<p>Included experimental and pre-post studies; <b>Programs:</b> duration and intensity ranged from single session (of 1 to 1.5 hours) to 12 weeks of 50 minute sessions, most frequently for high school students, provided by teachers and counselors <b>Targeted outcomes</b> included: suicide risk, knowledge, attitudes, coping, hopelessness, empathy.</p>	<p><b>Findings:</b> Overall, insufficient empirical support for curriculum based programs. Beneficial effects include increased knowledge and awareness. Gender differences were found for attitudes toward helping, self-reported coping, and hopelessness, - outcomes in which boys were negatively affected whereas girls tended to benefit.</p>
<p>Pullen, L. &amp; Gow, K. (2000). University students elaborate on what young persons "at risk of suicide" need from listeners, <i>Journal-of-Applied-Health-Behaviour</i>, 2 (1), 32-39.</p>	<p>Qualitative study analyzing content of focus group comments by at-risk youth, and then eliciting comments from 43 (n) young adults about possible helping responses</p>	<p><b>Sample:</b> mostly female group of first year social science students ages 18-30 <b>Method:</b> Based on a focus group study of 407 (n) at risk youth in Australia researchers composed a list of 12 helping responses. These responses were presented to students who then commented on what they perceived would be the most useful responses at a given point in time. Analysis making use of Kelly's personal construct theory</p>	<p><b>Results</b> identified 12 elements for helping responses: 1. be readily available 2. understand youth culture; knowledge and interest in youth culture was seen as encouraging confidence in counselor and the helping relationship. 3. Listen carefully, do not jump in, it's the youths' time to talk. 4. acknowledge youth's ambivalence about wanting to live or die; and pair it with empathic understanding 5. be empathic though empathy alone was not seen as sufficient. 6. explore problems and solutions together 7. encourage self-worth and competence 8. provide information/ advice, and referral – a more directive approach where it seems indicated 9. assist youth in feeling safe and calm (before exploring solutions) 10. avoid judgmental or patronizing responses 11. be confidential (except in cases of immediate risk for harm) 12. encourage a different perspective (hope, reasons to live)</p>
<p>Randell, B.P., Eggert, L.L., &amp; Pike K.C. (2001). Immediate post intervention effects of two brief youth suicide prevention interventions, <i>Suicide and Life Threatening Behaviors</i>, 31(1), 41-61.</p>	<p>Experimental three- group study of two programs plus a control condition for 341 (N) at-risk youth ages 14-19</p>	<p><b>Sample</b> 40% Caucasian, 13 % mixed, 13% Asian, 12% African American, 7% Hispanic, even distribution of gender <b>Measures:</b> suicidal behaviors, anger, depression, protective factors (coping, self-esteem), family risk <b>Interventions:</b> a) C-Care only: 1.5-2 hours comprehensive, computer assisted assessment of risk and protective factors followed by brief (1.5-2 hours) intervention to enhance connection and resources b) C-Care plus CAST, the latter is an adaptation of</p>	<p><b>Results</b> lend preliminary support for both interventions. Although all groups showed decreases in suicide risk behaviors, anger control and family distress. The combined condition and CAST only both led to improvements in depression, family goals met and self esteem, the combined C-Care plus CAST condition also led to improvements personal control, problem solving coping and perceived family support.</p>

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		<p>“Reconnecting Youth” (Thompson, Eggert, &amp; Herting, 2000) and involves 12 session peer-group Coping and Support Training focusing on life skills</p> <p>c) Treatment as usual control: assessment and facilitation of social support</p>	
<p>Rathus, J.H. &amp; Miller, A.L. (2001). Dialectical behavior therapy adapted for suicidal adolescents</p> <p><i>Suicide &amp; Life - Threatening Behavior</i>, 32 (2), 146-157</p>	<p>Quasi experimental study of DBT adapted for 29 (n, experimental group) outpatient suicidal youth compared to treatment a usual condition</p>	<p><b>Sample:</b> mostly female, Hispanic, age (m=16)</p> <p><b>Measures:</b> suicidality questionnaire, depression (Beck inventory), life problem inventory, scale for suicidal ideation, Scale for affective disorders and schizophrenia, interview for Personality disorder, psychiatric hospitalizations, suicide attempts during treatment, treatment completion</p> <p><b>Program:</b> adaptation of Linehan’s DBT shortened length to 12 weeks, including parents in skills training, including family members in individual therapy where indicated, reducing number of skills taught and simplifying language</p>	<p><b>Results</b> show that despite greater severity of problems pretreatment the DBT group had fewer hospitalizations and higher tx completion. No difference were found for suicide attempts (which is notably positive given the higher rate of severity, more borderline features, and higher rate of previous hospitalizations in tx group). These results lend preliminary support for this model.</p> <p><b>Limitations:</b> no random control, small sample. Lack of follow up data.</p>
<p>Rotheram-Borus, M.J., Piacentini, J., Cantwell, C, Belin, T.R., &amp; Song, J. (2000). The 18-month impact of an emergency room intervention for adolescent female suicide attempters, <i>Journal-of-Consulting-and-Clinical-Psychology</i>, 68 (6), 1081-1093.</p>	<p>Quasi experimental study of ER intervention with 140 female suicide attempters (SA), ages 12-18 years, and their mothers</p>	<p><b>Sample:</b> all female, 88% Hispanic mothers: largely homemakers, widowed/divorced/separated, only Spanish speaking</p> <p><b>Measures:</b> follow up for 18 months suicidality, psychiatric symptoms, family cohesion,</p> <p><b>Program:</b> (a) specialized ER care aimed at enhancing adherence to outpatient therapy by providing a soap opera video regarding suicidality, a family therapy session, and staff training; or (b) standard ER care.</p>	<p><b>Results</b> indicated that the intervention’s impact was greatest on maternal emotional distress and family cohesion for youth with high levels of psychiatric symptoms. Otherwise the program was associated with significantly lower depression scores in youth and Youths’ attendance at therapy sessions after the ER visit was significantly linked only to family adaptability.</p>
<p>Rudd, M.D., Joiner, T.E., Jobes, D.A., &amp; King, C.A. (1999). The outpatient treatment of suicidality: An integration of science and recognition of its limitations, <i>Professional-Psychology:-Research-and-Practice</i>, 30 (5), 437-446.</p>	<p>Recommendations for outpatient treatment based on review of literature (adults and youth)</p>	<p>22 recommendations for clinical practice, informed consent, diagnosis, monitoring, duration, therapeutic relationship, measuring outcomes, special recommendations for adolescents.</p>	<p><b>Recommendations</b></p> <ol style="list-style-type: none"> <li>1. Intensity of outpatient treatment should vary in accordance with risk indicators identified;</li> <li>2. If the target is a reduction in suicide attempts and related behaviors, treatment should be conceptualized as long-term and target skill deficits;</li> <li>3. If therapy is brief and the target variables are suicidal ideation, or related symptoms a problem-solving component should be a core intervention;</li> <li>4. Use an explanatory model of direct and indirect treatment targets;</li> <li>5. Use a standardized follow-up and referral procedure for clients dropping out;</li> <li>6. Disclose lack of definitive data regarding the efficacy approaches as a part of informed consent;</li> <li>7. pertaining to limits of confidentiality, offer a detailed review of available treatment options, fees, risks/benefits, and the likely duration of treatment;</li> <li>8. Provide an extended evaluation prior to specific recommendations;</li> <li>9. Evaluate for <i>DSM-IV</i> Axis I and Axis II diagnoses, document symptomatology;</li> <li>10. Provide diagnostic and symptom-specific treatment recommendations;</li> <li>11. Routinely monitor, assess, and document a patient’s initial and ongoing risk, document interventions for maintaining safety until suicidality has clinically resolved;</li> <li>12. For cases</li> </ol>

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			<p>of chronic suicidality, monitor, assess, and document ongoing risk, document interventions that address the chronic nature Note the chronicity of some symptoms (e.g., specific suicidal thoughts with a definitive plan), indicating factors that escalate risk (i.e., emergence of intent) versus those that diminish risk (e.g., lack of intent); 13. For acute crisis cases, provide a relatively short-term psychotherapy that is directive and crisis focused, emphasizing problem solving and skill building as core interventions; 14. For chronic cases of suicidality (particularly in the presence of an Axis II disorder), provide a relatively long-term psychotherapy in which relationship issues, interpersonal communication, and self-image issues are the predominate focus. 15. Develop a strong therapeutic alliance and make the clinical relationship central to the outpatient treatment plan (e.g., negotiating access, using the relationship as a source of safety and support during crises, attending to the patient's sense of profound loneliness); 16. Monitor and respond to countertransference reactions to the suicidal patient (particularly those that are chronically suicidal) and routinely seek professional consultation, supervision, and support for difficult cases; 17. Use a clearly articulated scheme for identifying, classifying, and discussing suicidal behaviors in treatment; 18. Use a consistent approach to assessing treatment outcome, incorporating both direct (i.e., suicidal ideation, suicide attempts, instrumental behaviors) and indirect markers of suicidality (i.e., markers of symptomatology, personality traits, or general level of day-to-day functioning); 19. Assess treatment outcome at predictable intervals, using psychometrically sound instruments to compliment and balance; patient self-report.</p> <p><b>Special recommendations for adolescents.</b></p> <p>20. Involve parents or guardians in the initial assessment, treatment planning, and ongoing suicide risk assessment process. Acknowledge their helpful contributions and empower them to have positive influences in their roles as parents and caregivers; 21. Evaluate the parent or caregiver's ability to fulfill essential parental functions and maintenance of a safe, nonabusive environment. If there exists a concern, address with parents or caregivers directly and notify protective services if appropriate; 22. Evaluate the parent or caregiver's ability to fulfill other parental functions such as consistent limit setting with follow through, healthy communication with the adolescent, and positive role modeling. Recommend treatment for severe, identifiable parental psychopathology and recommend interventions as needed.</p>
<p>Shaffer, D., &amp; Pfeffer, C. R. (2001). Practice parameter for the assessment and treatment of children and adolescents with suicidal behavior,</p>	<p>Guidelines based on review about epidemiology, causes, management,</p>	<ul style="list-style-type: none"> <li>• Assessment and emergency management; interface with the community.</li> <li>• Crisis hotlines, method restriction, educational programs, and screening/ case-finding suicide prevention strategies, media counseling.</li> <li>• Intervention in the community after a suicide,</li> </ul>	<p>Public health measures, such as restricting young people's access to firearms, may result in a short-term reduction in the rates of suicide, but there is not yet evidence that this effect would be lasting [OP]. Raising the minimum legal drinking age for young adults appears to reduce the suicide rate in the affected age group. Suicide awareness programs in schools frequently minimize the role of mental illness and, although</p>

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<p><i>Journal of the American Academy of Child &amp; Adolescent Psychiatry</i>, 40 (Suppl. 7), 24S–51S</p>	<p>and prevention</p>	<p>minimization of contagion or imitation, and training of primary care physicians and other gatekeepers</p>	<p>designed to encourage self-disclosure by students or third-party disclosure by their friends, have not been shown to be effective either in reducing suicidal behavior or increasing help-seeking behavior. Because curriculum-based suicide awareness programs disturb some high-risk students, a safer approach might be to focus on the clinical characteristics of depression or other mental illnesses that predispose to suicidality. In the absence of evidence to the contrary, talks and lectures about suicide to groups of children and adolescents drawn from regular classes should be discouraged. Instead self-completion questionnaires to screen could be helpful. There is ample evidence that teenagers in mid to late adolescence will, if asked directly, reveal this information.</p>
<p>Singer, J.B. (2006). Making Stone Soup: Evidence-Based Practice for a Suicidal Youth With Comorbid Attention Deficit/Hyperactivity Disorder and Major Depressive Disorder, <i>Brief Treatment and Crisis Intervention. Special Issue: Evidence-based brief treatment and crisis intervention with co-occurring disorders</i>, 6 (3), 234-247.</p>	<p>Reviews the treatment literature on suicide and comorbid ADHD/MDD.</p>	<p>review (includes key assessment areas; risk and protective factors) case vignette. 2-phase intervention based on expert consensus guidelines</p>	<p>There is very little empirical evidence about efficacious treatment for suicidal youth and none when combined with comorbid ADHD/MDD. Two phase treatment: 1. assessment and treatment of acute crisis includes the following areas: Assessment (attempts, ideation, underlying conditions, risk factors for repeated suicide attempt, protective factors, parent/guardian); Intervention (negotiate no-harm contract, limit availability of lethal means, provide support and 24-hr contact, hospitalize if necessary, refer to psychiatrist for an evaluation for medications); supervision and consultation, documentation 2. treatment to reduce comorbid symptoms</p>
<p>Stanley, N. (2005). Parents' Perspectives on Young Suicide, <i>Children &amp; Society</i> 19 (4), 304-315.</p>	<p>Study of 46 (n) surviving parents of youth suicide</p>	<p><b>Sample:</b> not otherwise specified  <b>Method:</b> questionnaire consisting of open questions regarding recognition of warning signs, and experiences with professional supports Messages to other parents</p>	<p><b>Results</b> of the question of recognition if parents had <u>recognized signs of depression</u> or illness at the time, or only after their child's death led to three groups: A) 21 parents recognized warning signs only in hindsight if at all: 4 responses described cases where, even with the benefit of hindsight, parents could identify no warning signs. Thus young people had successfully concealed their distress or their signals were too difficult to distinguish from normal adolescent behavior. The most frequently mentioned sign (cited by 12 parents) was social withdrawal. The second most frequently cited sign was sleep problems. Problems with appetite or eating (3), with self-harm (3), alcohol (3) and illicit drugs (2) were also mentioned in hindsight. B) 14 parents had seen warning signs but did not associate them with suicidal intent. Eight of them saw their child as depressed although the extent of symptoms varied. In some families, parents saw fluctuations in the same signs observed by parents in group A. C) 7 parents indicated they recognized warning signs at the time. In this group, 5 parents reported that their child had made a previous (and quite serious) attempt/s, and 2 parents observed direct and deliberate preparations for suicide. As to <u>experiences of professional help</u>, two-thirds of the parents (31) indicated they had not received needed help including service shotfalls</p>

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			such as lengthy waiting lists, lack of referral to specialist for depression, and barriers in communication with professionals (such as feeling sidelined by professionals). Parents also expressed they wished they had been more insistent/assertive in asking for appropriate services. <i>Messages to other parents:</i> Talk more about emotions and feelings to your child, even if they appear happy.; keep lines of communication open at whatever level seems possible. Try not to be judgmental; take depression and any expression of suicidal ideas seriously and seek professional assistance.
Strickland, C.J., Walsh, E., Cooper, M. (2006). Healing Fractured Families: Parents' and Elders' Perspectives on the Impact of Colonization and Youth Suicide Prevention in a Pacific Northwest American Indian Tribe, <i>Journal-of-Transcultural-Nursing</i> , 17 (1), 5-12.	Qualitative descriptive study, with 40 American Indian parents and 9 American Indian elders to obtain perspectives on community needs and strengths to help reduce youth suicide	<b>Sample:</b> parents and elders in Pacific Northwest American Indian tribe  <b>Method:</b> focus groups with parents, individual interviews with 9 elders	<b>Results:</b> Parents' and elders' responses were very similar. All voiced concerns about the vicious cycle of fractured families that contribute to difficulties in school and job markets. And all recognized a need for family and community-based interventions to reduce stress, depression, and hopelessness. These stressor were seen in the context of historical and ongoing discriminatory experiences. The major task participants addressed was holding the family together and healing intergenerational pains. Topics parents discussed were holding onto cultural values, holding the family together, getting through school, and getting a job.
Thompson, E.A., Eggert, L.L., & Herting, J.R. (2000). Mediating effects of an indicated prevention program for reducing youth depression and suicide risk behaviors, <i>Suicide-and-Life-Threatening-Behavior</i> , 30 (3), 252-271.	Quasi experimental study of personal growth class (PGC) program for 106 (n) youth ages  aka "Reconnecting Youth"	<b>Sample:</b> mostly female, Caucasian <b>Measures</b> at pre tx, 5 months and 10 months follow up: suicide risk behaviors, perceived support from teachers, perceived support from peers, depression, personal control <b>Interventions Groups</b> A) 5 months PGC: PGC consists of daily 55 min class for small groups delivered by trained school personnel focused on social support, life skills (anger management, coping, decision making) B) 10 months PGC C) assessment only	<b>Results</b> support the notion that group leaders (teacher support) plays a pivotal role since it increased peer support, which in turn had some positive effects on suicidal behaviors and perceived personal control.
Velting, D.M., Rathus, J.H., & Asnis, G.M. (1998). Asking adolescents to explain discrepancies in self-reported suicidality, <i>Suicide and Life-Threatening Behavior</i> , 28 (2), 187-196.	Exploratory study of 48 (n) adolescents ages 12-20 in outpatient suicide prevention program in the Bronx to establish discrepancies in	<b>Sample:</b> majority female, 71% Hispanic, 21 % African-American <b>Measures:</b> self-administered assessment battery, compared to semi-structured interview assessment, followed by postinterview assessment discussion with adolescents.	<b>Results</b> showed that 50% of adolescents provided discrepant information (mostly between the two forms of assessment). Most of the non-converging responses were due to confusion for youth how to understand operational definitions, such as how to distinguish suicidal gestures and attempts, or suicidal ideation and gestures. Youth tended to identify actions as "attempts" on the self-administered assessment and as "gestures" in the interview. It remains unclear, which other factors influence inflated or minimized reporting (e.g. does the presence of an interviewer, lead youth to give socially desirable, minimizing reports?) results point to the unreliability of single types of assessment and the usefulness of complementary methods.

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	self-reports and explore reasons		
Webster, D.W., Vernick, J.S., Zeoli, A.M., & Manganello, J. A. (2004). Association Between Youth-Focused Firearm Laws and Youth Suicides, <i>Journal-of-the-American-Medical-Association</i> , 292 (5), 594-601.	Quasi experimental study to evaluate the association between youth-focused firearm laws and suicides among youth	<p><b>Sample:</b> 63954 (n) suicides among youth aged 14 through 20 years during the 1976-2001</p> <p><b>Measures:</b> State and federal firearm laws and rates of firearm, nonfirearm, and total suicides among US youth aged 14 to 17 and 18 through 20 years.</p>	<p><b>Results</b> show that 62% of suicides were committed with firearms. There is evidence that Child Access Prevention (CAP) laws (intended to keep firearms from youth through gun safe storage), are associated with a modest reduction in suicide rates among youth aged 14 to 17 years (8.3% decrease) As currently implemented, minimum age restrictions for the purchase and possession of firearms do not appear to reduce overall rates of suicide among youth.</p>
Westefeld, J.S., Kettmann, J.D., Jenks, L. , Lovmo, C., & Hey, C. (2007). High school suicide: Knowledge and opinions of teachers, <i>Journal of Loss &amp; Trauma</i> , 12 (1), 31-42.	Questionnaire study of 167 (n) High School teachers in five schools in the Midwest	<p><b>Sample:</b> 61% women, teaching experience mean 14 years, mode 2 years,</p> <p><b>Method</b> open and close-ended questionnaire assessing, opinion, knowledge, experience re. youth suicide, and resources at school</p>	<p><b>Results</b> show that 61% of respondents thought suicide to be an important issue, 73% worried about a young person being suicidal, and 78% knew a young person who had committed or attempted suicide. The vast majority of teachers thought a suicidal youth would most likely confide in peers, and only 2% thought they might turn to parents, pointing to the need to educate young people on how to react to a suicidal peer. While teachers showed some familiarity with risk factors, results still demonstrate a need for training and education in knowing and assessing risk factors. In the open-ended question, 47% of respondents indicated they do "nothing" when they wonder about the suicidality of a student, and 67% indicated they were not aware of any policies at school for intervening, and 40% did not know of any resources at school for prevention or intervention. The authors conclude that there is a high need for education on risk factors, developing a prevention and response plan at each school, and training youth and teachers.</p>