ENDANGERED YOUTH

A REPORT ON SUICIDE AMONG ADOLESCENTS INVOLVED WITH THE CHILD WELFARE AND JUVENILE JUSTICE SYSTEMS

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INTRODUCTION

Youth suicide is the third leading cause of death among adolescents in Connecticut and nationwide. Although the actual occurrence is relatively low compared with other serious concerns that children and adolescents face, given the high impact and severe implications of youth suicide, it is a problem that society cannot ignore. Suicide affects not only the individual, but also the child's family, peers, school and community. The phenomena of youth suicide must be further understood and work must be done to identify children and adolescents at risk and prevent future occurrences. Every completed suicide is a potentially preventable death.

In order to understand the phenomena of youth suicide, it is important to first examine the interacting systems of which children and families are a part. In Connecticut, children and families in need of protection, intervention and support are often served by the Department of Children and Families (DCF). Following the apparent suicide of three children and youth involved with DCF in Connecticut in June and July of 2004, Commissioner Darlene Dunbar launched a comprehensive prevention, early intervention, treatment and postvention risk reduction project through the Office of Planning and Evaluation, and Division of Research and Development. The adolescent suicide project was designed to mobilize existing resources within and outside of DCF, and increase awareness and collaboration among key professional groups, state agencies and community organizations through training and workforce development initiatives.

This report highlights the critical relationships and interdependencies among professionals and communities that are necessary to respectfully and effectively intervene with those vulnerable children, youth and their families involved in the child welfare and juvenile justice systems; and presents findings from the increasing body of clinical and research literature indicating that adolescent suicide is not random, uncontrollable or inevitable.

Nationally, children and youth involved in the child welfare and juvenile justice systems are four to six times more likely than those in the general population to experience severe behavioral health problems that impede their educational, psychological and interpersonal functioning (Teplin, Abram, McClelland, Dulcan & Mericle, 2002). Oftentimes, subsets of these same youth are at even higher risk for youth suicide. A range of biological, psychosocial and educational factors may contribute to an individual's inclination to consider suicide. It is most often stable family structures, capable community networks and competent professional support that can best nurture children and youth, and keep them safe. Promising areas for intervention lie in the identification and strengthening of protective factors that keep the majority of children and youth from resorting to suicide or violence. Every organization that has contact with adolescents—families, schools, communities, healthcare providers, policymakers, and media—must help build upon resilience by providing the support and intervention necessary to contribute to an adolescent's sense of safety, dignity and preference for healthy alternatives.

SECTION 1:

BACKGROUND

The Connecticut Department of Children and Families was established under Section 17a-3 of the Connecticut General Statutes as a comprehensive and consolidated public agency serving children and youth (primarily under age 18), and their families. Their mandate includes a spectrum of behavioral health services, child protection and family services, juvenile justice services, substance abuse-related services, prevention and early intervention services, and educational programs (acting in the capacity of a school district for the children and youth in its care). At the time of this report, DCF employed approximately 3,500 full-time interdisciplinary staff. The agency's operating budget for State Fiscal Year 2005 was approximately $700 million.

In October, 2003, DCF entered into an historic Exit Plan agreement with the Juan F. Federal Court Monitor and State of Connecticut, to ensure that positive outcomes for children, youth and families would be designed, implemented and achieved by emphasizing collaborative services, community partnerships and active decision making at local levels. The Positive Outcomes for Children and Families Plan delineates 22 specific outcome measures whose achievements are prerequisites for termination of the Federal Court's jurisdiction, to be determined in November 2006. This commitment culminated in a decentralized organizational structure encompassing 14 statewide Area Offices that were established in February 2004. Each one was equipped with an integrated program design incorporating behavioral health, child protective services, juvenile justice and continuous quality improvement. In April 2005, an additional Area Office was developed, in order to increase DCF's capacity to offer accessible and localized services to children and families in an urban community with significant educational, medical and psychosocial needs.

NEED

Interdisciplinary services for children, youth and families in the child welfare and juvenile justice systems have become more widely available during the past decade. Despite well-intentioned and carefully-conceived assessment and intervention models, the process of implementation appears to be fragmented and has lacked coordination among relevant professional groups representing schools, health care organizations and community agencies. As a result, these services are often less effective than they might be, focused on individual youth and specific crisis-oriented problems, and virtually ignoring the wealth of resources and relationships fostered within families, communities and natural social systems. Indeed, the majority of reports generated by child advocates and independent quality management teams reviewing critical incidents and child fatalities during the past several years, reveal that significant service fragmentation, ineffective coordination, and poor communication among members of the helping system represent core areas in need of improvement.

Traditional service delivery systems often continue to emphasize individual pathology and dysfunctional patterns of interaction without adequately considering the social context in which problematic behavior occurs. Programs and practices that rely on pathology-based theories tend to be marked by "discipline-centered" activities, reflecting a dichotomy between child safety and therapeutic healing. Little attention is given to the ways in which a family or significant social system functions; how the behavior of the youth is a manifestation of their participation in an interactive system; how the actions of the legal system and various social service agencies reverberate through the family; and, how constructive changes must encompass the complex relational context in which the youth is embedded.

PURPOSE

The purpose of this report is to familiarize professionals representing a broad range of agencies with an interdisciplinary framework that adequately addresses the spectrum of risk factors for suicide that children, youth and their families involved in the child welfare and juvenile justice systems experience. Key areas to be considered include behavioral health, child safety, educational programming, legal services and medical domains, as well as the dimensions of prevention, early intervention, treatment and postvention linked to best practices highlighted in current literature and research. Case studies are utilized to illustrate the challenges and complexities confronting families, communities and professionals, while offering opportunities for learning, greater collaboration and the development of respectful and effective service delivery.

SECTION 2:

SCOPE OF THE PROBLEM

YOUTH SUICIDE

Suicide is a worldwide mental health crisis. According to the World Health Organization (WHO, 2000), approximately one million people die each year by their own hand. Globally, suicide rates have increased by approximately 60% in both developing and industrialized nations in the last 45 years. In the United States, there were approximately 30,000 deaths attributed to suicide annually between 1996 to 1999, making suicide the ninth most frequent cause of death overall (Peters & Murphy, 1998). A recent survey indicated that one in 14 adults (7%) have known someone who committed suicide within the previous year (Crosby & Sacks, 2002). However, focusing on the number of completed suicides masks the extent of this mental health crisis. Using various data sources, the American Association of Suicidology (1999) estimated that there are 25 attempts for every completed suicide in the nation, suggesting that there are upwards of 750,000 suicide attempts in the United States annually.

Trends in suicide rates among children and youth are even more alarming. In the United States, the Centers for Disease Control reports that suicide among adolescents ages 15 to 19 years tripled between 1952 and 1995 (CDC, 2002). Recent trends among younger adolescents are of particular concern. Between 1980 and 1997, the rate of suicide among 15 to 19-year-olds increased by 11%, but more than doubled among 10 to 14-year-olds. In 2001, suicide was the third leading cause of death for children and youth in the United States (MMWR, 2004). This translates to the sobering statistic that on average a young person in the nation kills him or herself every two hours (Peters & Murphy, 1998).

SUICIDE RATES BY GENDER AND ETHNICITY

Rates of suicide among adolescents in the United States vary greatly by both gender and race/ethnicity. In 1998, suicide was the third leading cause of death for males 19 years old and younger in the United States, but the sixth for females in the same age range (CDC, 1998). Girls had a lower suicide rate than boys across all race/ethnic groups. According to national statistics, the lowest risk group is African American girls, representing approximately 2% of total fatalities, compared with a high of 10% of all deaths for Native American and Alaska Native young women. European American male adolescents are at the highest risk for suicide which accounts for 11.3% of all deaths for male youth in this ethnic group. Suicide ranks as the third most frequent cause of death for African American adolescent males, accounting for approximately 4% of all deaths in this racial group. Although these rates remain low relative to Whites, the rate of suicide among African American males has increased dramatically of late, suggesting that prevention and intervention initiatives should strategically target this segment of the population in addition to other high-risk gender and ethnic groups (Ialongo et al., 2002; Shaffer, Gould & Hicks, 1994).

The rate of suicide among Indians and Alaska Natives reached an alarming peak in the 1970s, and, although rates of death by suicide have declined from these levels, they have remained significantly higher than all races in the United States throughout the past two decades (DeBruyn, Wilkins, Setterburns & Nelson, 1997). In 1998, suicide accounted for 16.7% of all deaths among Native American and Alaska Native young men, making it the second leading cause of death for young Native males (Patel, R. N., Wallace, L. J. D. & Paulozzi, L., 2005).

The American Association of Suicidology (1999) estimated that, among youth, there may have been as many as 200 attempts for every completed suicide. In 2002, approximately 124,409 visits to U.S. emergency rooms were attributed to suicide attempts and other self-harm incidents among youth ages 10 to 24 (MMWR, 2004). One of the most reliable sources of data about suicidal ideation (thoughts about suicide) and behaviors (attempts) are responses to the CDC's Youth Risk Behavior Survey administered annually to high school students throughout the United States. The responses to the 2001 YRBS indicated that 19% of all high school students had experienced suicidal thoughts in the previous year, almost 15% made plans to attempt suicide, and 8.8% of all youth made suicide attempts in the previous year (CDC, 2001).

Section 2:

As is true of deaths by suicide, there are marked differences in suicidal ideation and suicide attempts by race/ethnicity and gender. European American (19.4%) and Hispanic American youth (19.4%) reported identical rates of suicidal ideation, while African American youth (13.3%) consistently reported lower levels of suicidal ideation. Although European American youth reported higher rates of suicidal ideation, they reported lower rates of actual attempts (7.9%) than African American (8.8%) or Hispanic (12.1%) youth.

In terms of gender differences in suicidal behavior, data from the YRBS indicated that girls were significantly more likely to report an episode of suicidal ideation in the past year (23.6%) than boys (14.2%), and were also much more likely to report having made a suicide attempt (11.2%) than were boys (6.3%). Although these data may have appeared to contradict the data for deaths by suicide presented above, in actuality they have indicated that while girls are more likely to consider and even attempt to commit suicide, boys' attempts were more lethal (e.g., O'Donnell, 1995). These data are consistent with smaller studies in which gender differences in suicidal behavior have been examined (Lewinsohn, Rohde & Seeley, 1994; Reynolds, 1990).

YOUTH SUICIDE IN CONNECTICUT

The most recent year for which there are YRBS data from the State of Connecticut to compare to the United States is 2003 (CDC, 2004). Overall, youth in Connecticut reported similar levels of suicidal thoughts and attempts as did youth in the United States as a whole: 16.2% of Connecticut youth and 16.9% of U.S. youth reported that they seriously considered attempting suicide in the past 12 months; 13.5% of Connecticut youth and 16.5% of U.S. youth made a plan about how they would attempt suicide; 10.3% of Connecticut youth and 8.5% of U.S. youth reported having actually attempted suicide one or more times in the past year; and 3% of Connecticut youth and 2.9% of U.S. youth reported that they had required medical attention for a suicide attempt in the past year (see Table 1). This translates to more than 800 youth attempting suicide in Connecticut each year.

TABLE 1

PERCENT OF YOUTH CONSIDERING SUICIDE IN PAST YEAR BY NEW ENGLAND STATE AND U.S. TOTAL POPULATION

2003 Youth Risk Behavior Survey	US%	CT%*	MA%	ME%	NH%	RI%	VT%
Seriously considered suicide	16.9	16.2	16.3	17.1	17.8	14.1	N/A
Made a plan	16.5	13.5	12.5	15.0	13.3	11.2	13.6
Actually attempted	8.5	10.3	8.4	9.0	7.7	8.3	7.2
Required medical attention	2.9	3.0	2.8	2.9	2.5	2.9	2.3

U.S. and other New England Data CDC
http://apps.nccd.cdc.gov/yrbss
*CT data DPH
http://www.dph.state.ct.us/BCH/HISR1/graphs

SECTION 3:

RISK FACTORS

SOCIAL FACTORS

In recent years, a number of risk factors for adolescent suicide have been identified, many of them related to family context and family processes (Beautrais, Joyce & Mulder, 1996; Fergusson, Woodward, & Horwood, 2000; Johnson, Cohen, Gould, Kasen, Brown, & Brook, 2002; King, Schwab-Stone, Flisher, Greenwald, Kramer, Goodman, et al., 2001). Higher rates of suicide attempts have been found among adolescents from single-parent families than those from two-parent families (Andrews & Lewinsohn, 1992; Velez & Cohen, 1988), and high levels of family conflict have been observed in families of youth who have both attempted and completed suicide (Joffe, Offard & Boyle, 1988; Wagner, 1997).

Adolescents who had run away from home were found to have been almost three times more likely to have suicidal thoughts or behaviors than youths who had not (Gould et al., 1998; Molnar, Shade, Kral, Booth, & Walters, 1998). Recent studies have also found that a lifetime history of physical and sexual abuse increases the risk of suicide for both genders (Brent, Braugher, Bridge, Chen & Chiapetta, 1999; Garofalo, Wolf, Wissow, Woods, & Goodman, 1999; Goldsmith, 2001; Mann, Waternaux, Haas, & Malone, 1999; Molnar, et al., 1998), and youth who have experienced traumatic loss are five times more likely than their peers to report suicidal ideation (Prigerson, et al., 1999). For boys, stressors related to frequent legal or disciplinary problems were associated with suicide risk (Brent et al., 1999). Access to firearms may be a greater risk to boys as well, as they are six times more likely than girls to use firearms to kill themselves (O'Donnell, 1995).

PSYCHIATRIC ISSUES

The strongest and most consistent risk factor for suicidal behavior is mental illness (Gould, Greenberg, Velting & Shaffer, 2003). This relationship is consistently observed in studies of clinical populations, in large community studies examining risk factors for suicidal thoughts and behaviors in the general population (such as the National Comorbidity Study and the YRBS), and in studies using "psychological autopsy" techniques (i.e., in which parents or caregivers, close friends and school personnel are interviewed after a death by suicide to assess the mental status and family dynamics of the youth in question) (Brent, et al., 1999; Goldsmith, 2001; Rao, Weissman, Martin & Hammond, 1993; Shaffer, 1988; Shaffer, Gould, Fisher, et al., 1996).

The majority of young people who have thought about or acted upon their suicidal inclinations have at least one psychiatric illness (Brent & Kolko, 1990), and the symptoms of the mental illness are most frequently present at least a year or more prior to the death of those who ultimately kill themselves (Shaffer et al., 1996). Researchers investigating cases in which youth have attempted and completed suicide report that between 76%-92% meet clinical criteria for mental illness (Andrews & Lewinsohn, 1992; Brent et al., 1999; Gould et al., 1998; Mazza & Reynolds, 2001). Gould and her colleagues (1998) found that 47.6% of suicide attempters had at least one additional/comorbid psychiatric diagnosis. Other researchers have found comorbidity rates as high as 70%-81% among completers (Mazza & Reynolds, 2001). Thus, children and adolescents who attempt suicide are likely to have other presenting psychiatric issues and concerns.

Section 3:

DEPRESSION

The most frequent psychiatric diagnosis among youth with suicidal thoughts and behaviors is depression (Kelly, Cornelius & Lynch, 2002). Major depression is an illness lasting more than one month with symptoms that may include depressed or irritable mood, loss of energy, decreasing concentration, sleep disruption, a sense of hopelessness, and thoughts of death and suicide.

Depression is a fairly common psychiatric diagnosis among adolescents with frequency rates similar to those found in adults. Data from the National Comorbidity Study reveal that 15.3% of 15 to 19-year-olds have a lifetime history of major depression, and 9.9% have a lifetime history of minor depression (Kessler & Walters, 1998). The Youth Risk Behavior Survey data indicate that almost a third of high school students (28.3%) reported having felt sad and hopeless enough almost every day for two weeks during the past year that they stopped doing some usual activities (Grunbaum, et al., 2002). Among community samples, major depression was found almost twice as often in girls (21.3%) as in boys (9.5%) (Kessler & Walters, 1998; see also Lewinsohn, Rhode, Seeley, Klein, & Gottlieb, 2000). However, among those who have attempted suicide, the rate of major depression may actually be higher among boys (64.5%) than among girls (55.6%) (Andrews & Lewinsohn, 1992). Research indicates that depression is a consistent risk factor for suicidal ideation and attempts across race/ethnic categories (Ialongo, et. al, 2002; Negron, Piacenti, Graae, Davies, & Shaffer, 1997; Olvera, 2001; Rao et al., 1993).

Bipolar disorder may pose additional risks for suicidal behavior. In a psychological autopsy study contrasting youth who had attempted with those who had completed suicide, Brent and colleagues (1988) found similar rates of major depression in these two groups but found elevated rates of bipolar disorder among completers, when compared to those who had made an unsuccessful attempt. More recent studies have also found bipolar disorder to be a significant risk factor for suicidal behavior (Goldsmith, 2001; Kelly et al., 2002; Shaffer et al., 1996).

OTHER MENTAL AND BEHAVIOR DISORDERS

Other mental health problems are also related to suicidal thoughts and behaviors. Several studies have found anxiety disorders to be associated with increased suicide attempts (Gould et al., 1998; Kelly, et al., 2002; Placidi, et al., 2000; Shaffer et al., 1996). A diagnosis of posttraumatic stress disorder also appears to increase risk of both suicidal ideation and attempts, particularly when combined with a diagnosis of major depression (Oquendo, Grent, Birmaher, Greenhill, Kolko, Stanley et al., 2005).

Among the personality disorders, Cluster B of the Diagnostic and Statistical Manual for Psychiatric Diagnosis (DSM-IV) Axis II disorders (narcissistic, antisocial, and borderline personality) were most frequently diagnosed among youth who had attempted suicide (Oquendo et al., 2005; Mann et al., 1999; Mazza & Reynolds, 2001; Pearson, Stanley, King & Fisher, 2001; Placidi, et al., 2000). In addition, panic attacks and aggression are significantly associated with both suicidal ideation and attempts, particularly when panic attacks are secondary to depression (Gould et al., 1998; Pilowsky, Wu & Anthony, 1999). Finally, there is also evidence that conduct disorder is associated with suicidal behavior (Andrews & Lewinsohn, 1992; Brent et. al, 1999; Joffee et al., 1988; Kelly, et al., 2002; Shaffer et al., 1996).

SEXUAL ORIENTATION

There has been ongoing debate about sexual orientation and its relationship to youth suicide (Hershberger & D'Augelli, 1995, Russell, 2003; Savin-Williams, 1994). The National Longitudinal Study of Adolescent Health, the only national data source in the United States that includes sexual minority status for adolescents, indicated that homosexual and bisexual youth of both sexes were at greater risk for suicidal thoughts and attempts than their heterosexual peers (Russell, 2003). In particular, boys with same-sex relationship partners and girls with partners of both sexes were more likely than exclusively heterosexual youth to report suicidal thoughts (Udry & Chantala, 2002).

Representative samples of youth were questioned about suicidal thoughts and behaviors along with questions about sexual identity as part of the YRBS in Massachusetts in 1993 and Vermont in 1995. One study utilizing YRBS data from Massachusetts (Garofalo, et al., 1999), after controlling for other leading risk factors, indicated that gay, lesbian and bisexual youth were more than twice (2.28) as likely as heterosexual peers to report that they had attempted suicide in the past 12 months. The relationship between sexual orientation and reported attempts was clear for boys; for girls, however, suicidal behavior appeared to be mediated by drug use and violence/victimization. Finally, a recent study of urban gay men who reported a history of suicidal behavior found that all reported attempts occurred when the respondents were age 25 years or younger, suggesting that adolescence and young adulthood are the most vulnerable developmental stages for this population (Paul et al., 2002).

SUBSTANCE ABUSE

Alcohol abuse and dependence comprise another significant risk factor for suicide in children and youth, particularly when these are a consequence of, or in response to, depression. When combined with mood disorders, substance abuse/dependence greatly increases the risk of suicide for adolescents of both genders (Brent et al., 1999). Evaluations of autopsy reports indicate adolescents who have completed suicide are frequently using alcohol at the time they take their own lives (Brent & Kolko, 1990; Gould et al., 1998). In one study, 33% of youth who had completed suicide were found to have a blood alcohol level (BAC) of .1% (22mm/L) or higher at the time of death (Brent et al., 1988; see also Shaffer et al., 1996). In another smaller study, half of the White males under age 20 who completed suicide in a Georgia county tested positive for alcohol (Garlow, 2002). Alcohol use is also related to suicide attempts.

According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2001), 8.6% of youth from the general population who reported no alcohol use in the past year were at risk for suicide while 19.6% who did report using alcohol in the past year were at risk. Drinking within three hours of a suicide attempt and alcoholism were both significantly related to nearly lethal suicide attempts (Powell, et al., 2001). Among Canadian youth evaluated for suicidal ideation in one emergency room, 50% indicated that they used alcohol (Greenfield, Larson, Hechtman, Rousseau, & Platt, 2002). Gould (1998) and colleagues found that substance abuse/dependence differentiated between youth with suicidal ideation and those who had attempted suicide.

While alcohol is the most frequently abused substance among youth, other drug use/abuse is also associated with increased risk for suicide attempts and completions (SAMSHA, 2001). Compared with suicide attempters who were subsequently hospitalized, those who completed suicide were more likely to have a history of substance abuse/dependence (Gould et al., 1998). In examinations of specific drug use/abuse, inhalants, cocaine, and hallucinogens were most strongly related to suicide attempts. Cannabis use, in contrast, has not been significantly associated with suicide attempts (Garofalo et al., 1999; Kelly et al., 2002; Thatcher, Reininger & Drane, 2002).

YOUTH INVOLVED WITH THE CHILD WELFARE AND JUVENILE JUSTICE SYSTEMS

Youth known to state child welfare and juvenile justice systems commonly present with multiple social, biological and psychological factors that place them at the highest risk for suicide. A recent study in the Province of Quebec, Canada found that the risk of suicide for youth involved with the child welfare and juvenile justice systems was five times that of the general adolescent population (Farand & Renaud, 2004).

The very factors that bring these youth to the attention of child welfare and juvenile justice authorities–abuse, neglect and disorders in conduct–also make them extraordinarily vulnerable to suicidal thoughts and behaviors. Their early life histories are frequently marked by maltreatment and trauma as well as failure to form meaningful attachments to stable caregivers.

A recent retrospective study of more than 17,000 adults tested the relationship between adverse childhood

experiences (ACE) defined as emotional abuse, physical abuse, sexual abuse, parental mental illness, substance abuse, incarceration, domestic violence, and separation or divorce, and lifetime attempted suicide. An individual's ACE score - a cumulative tabulation of these experiences - correlated with suicide attempts at P<.001, such that the likelihood of an individual attempting suicide increased as his or her ACE score increased. For every increase in the ACE score, the risk of suicide increased by 60%. The authors concluded that approximately two-thirds of suicide attempts are attributable to the cumulative effects of the adverse childhood experiences identified in this study (Dube, Anda, Felitti, Chapman, Williamson, & Giles, 2001).

ISSUES WITH EARLY ATTACHMENT

As other researchers in the area of youth suicide have noted, adverse experiences in early life may place children on a life course trajectory that results in a constellation of factors in adolescence highly correlated with suicidal thoughts and behaviors (Beautrais et al., 1996; Fergusson et al., 2000). For example, maltreatment in infancy may lead to problems in attachment which, in turn, correlate with failure to develop social skills, resulting either in social withdrawal and isolation, or aggression and problems in behavior and conduct (Finzi, Cohen, Sapir, & Weizman, 2000). These outcomes may be associated with the feelings of hopelessness and psychological abandonment that could contribute to depression and suicidal ideation in adolescence.

Several studies have examined the relationship between quality of attachment in early childhood and suicidal behavior in adolescence (Adam, Sheldon-Keller, & West, 1996; Lessard & Moretti, 1998). These studies have found two primary attachment patterns in suicidal adolescents: preoccupied attachment and dismissing attachment. As the names suggest, preoccupied attachment occurs when the child is constantly worried or preoccupied with the caregiver's presence and represents an anxious form of attachment where the child fears that she will be left alone and lacks the ability to self soothe. Dismissing attachment occurs when the child does not demonstrate a healthy attachment to the parent or caregiver and does not demonstrate appropriate connectedness or concern with their parent. Both of these patterns are associated with attachment-related trauma. However, it appeared that a preoccupied attachment pattern, in which the youth was unable to cognitively address and resolve the traumatic early relationship, was more closely related to suicidal ideation than the dismissing attachment in which the youth achieved some psychological distance from the traumatic relationship. According to Lessard and Moretti (1998), greater lethality in contemplated suicide methods has also been associated with preoccupied attachments.

A number of family-related factors have been found to contribute to problems in infant-caregiver attachment. These include maternal substance abuse, maternal depression and other forms of mental illness, and instability and violence in the parental relationship (O'Connor, Sigman, & Brill, 1987; Owen & Cox, 1997; Teti, Gelfand, Messinger, & Isabella, 1995). Each of these factors decreases the caregiver's sensitivity to the needs and signals of the infant. Caregivers who are described in studies of attachment as insensitive, emotionally inaccessible, unresponsive, or rejecting were likely to have insecurely attached infants who formed an internal representation of themselves as unworthy and unable to elicit positive responses from others in normative ways. In its most extreme form, insecure attachment appears as a disorganized, disordered response to a caregiver who is perceived by the child as threatening or frightening, as in instances of severe maltreatment (Carlson, 1998; Zeanah, Keyes, & Settles, 2003). Insecure attachment may contribute to poor functioning of the child and lead to other more serious concerns that can place them at higher risk for other issues in the future.

Abused and neglected children who enter the foster care system frequently exhibit the extreme form of disorganized attachment identified as reactive attachment disorder (RAD), a DSM-IV-TR diagnostic category in which the child shows "markedly disturbed and developmentally inappropriate social relatedness in most contexts…" There are two types of RAD. In the first type, the child is observed to be extremely inhibited and withdrawn, hypervigilant and avoidant in social relationships. In the second, disinhibited type, the child is indiscriminate and over-responsive to others, appearing to form attachments

without hesitation or selectivity. Recent research indicates that these two categories are not mutually exclusive, and that there are children who exhibit both types of RAD (Smyke, Dumitrescu, & Zeanah, 2002). Reactive attachment disorders may compromise a child's functioning and may complicate existing familial and individual difficulties. These attachment difficulties may lead to a constellation of problems that could lead to more serious emotional and psychiatric difficulties and place the child at higher risk for future concerns, including suicide.

Longitudinal studies of children with disorganized attachments identified long-term consequences, including behavior problems in preschool, elementary school and high school, and psychopathology and dissociation in adolescence (Carlson, 1998; Lyons-Ruth, Alpern & Repacholi, 1993). Independent of their association with psychopathology, difficulties in attachment also deprive a young person of the social and emotional support and connectedness that can mediate the normative processes of adolescent development, leaving such youth with feelings of isolation and disconnection associated with suicidality. Although attachment difficulties in and of themselves can not be pointed to a direct causal factor for future suicidality, these concerns certainly contribute to poor functioning and lead to risk factors that may make the child more vulnerable to mood disorders and suicidality in the future.

SUICIDE AND DELINQUENCY

Youth who are known to the juvenile justice system because of disorders in conduct, like youth in the child welfare system, are at very high risk of suicidal behavior. In the only national study of completed suicide among incarcerated youth in the United States, those held in adult jails had a suicide rate 165 times higher than youth in the general population, while youth in juvenile detention facilities had a rate 4.6 times higher than the general population of youth (Memory, 1989). Esposito and Clum (1999) reported that 51% of incarcerated youth in their study expressed suicidal ideation. Morris and colleagues (1995) assessed suicidal ideation in nearly 2,000 youth incarcerated in 39 detention facilities across the United States using a form of the Youth Risk Behavior Surveillance Survey (YRBSS). Twenty-two percent of responding youth had seriously considered suicide, 20% had made a plan to commit suicide, 16% had made at least one attempt at suicide, and 8% had been injured in such an attempt during the preceding year. Multiple studies suggested an association between affective disorders and conduct disorders in juvenile offenders (Fergusson, Lynskey, & Horwood, 1996; Myers, Burket, Lyles, Stone & Kemph, 1990; Pliszka, Sherman, Barrow, et al., 2000; Timmons-Mitchell, Brown, Schultz, Webster, Underwood, & Semple, 1997). A Quebec study found that for all youth known to the child welfare and juvenile justice systems, adolescent girls in the juvenile justice system were at highest risk for suicide because of their high rate of co-occurring conduct and affective disorders (Farand & Renaud, 2004).

A recent study of 1,829 youths detained in Chicago's Cook County Detention Center found that 66.3% of males and 73.6% of females had one or more diagnosable psychiatric disorders (Teplin, Abram, McClelland, Dulcan & Mericle, 2002). Half of the males in this study and almost half of the females also met diagnostic criteria for a substance abuse disorder, which is believed to be a major precipitating factor in many suicide attempts. A study of male delinquents in two Swedish correctional facilities found that 82% met criteria for substance dependency and 29% had made at least one suicide attempt (Moeller & Hell, 2003).

Epidemiological studies demonstrate that youth in the juvenile justice system are likely to have not just one but several co-occurring psychiatric disorders (Abram, Teplin, McClelland & Dulcan, 2003). While problems with aggression and antisocial behavior are most frequently observed, many youth also have significant mood disorders (e.g., depression, manic-depressive illness), anxiety disorders (e.g., panic, social phobia, generalized anxiety, obsessive or post-traumatic stress), and attention and impulse control disorders.

It stands to reason that youth in the juvenile justice system would be at significantly higher risk for suicide than youth in the general population, as many of the same factors that place a young person at risk of suicide are associated with problems in conduct and antisocial behavior leading to delinquency. Family violence, maltreatment in early childhood, parental sociopathy - including substance abuse

and antisocial behavior - have all been associated with negativity and aggression in preschoolers, oppositional behavior as well as problems in learning and attention in the early school years, and drug and alcohol involvement as well as increasing problems in conduct and antisocial behavior during puberty and early adolescence (Hollender & Turner, 1985; Loeber & Stouthamer-Loeber, 1998).

Youth in the juvenile justice system also come primarily from populations that are less likely to receive treatment for emotional and behavior problems as well as learning difficulties during childhood, so that by the time they reach adolescence, they have often been labeled as unmanageable or ungovernable and beyond any treatment except incarceration. In increasingly recognizing the mental disorders that underlie much delinquent behavior, state child-serving systems are beginning to establish programs for screening and treating mental health problems in these youth.

As the cases of suicide in youth known to the Connecticut child welfare and juvenile justice systems described in the next section illustrate, histories of early child maltreatment, extreme family and parental dysfunction and instability, inadequate caregiving and childhood delinquency can form a pattern ultimately leading to suicide in youth who come to the attention of the child welfare and juvenile justice systems.

SECTION 4:

CASE STUDIES OF YOUTH SUICIDE

Section 4:
Case Studies of Youth Suicide

A recent case review of seven incidents involving adolescent suicide and/or undetermined deaths of youth at high risk for suicide during a one-year period –while under the supervision of Connecticut child welfare or juvenile authorities or whose supervision had recently been terminated– found the kind of longstanding family histories of dysfunction and maltreatment that are often predictive of problems in psychosocial functioning in later childhood and adolescence. In each of the seven cases, there was evidence of some form of physical, sexual or emotional abuse, trauma exposure, impaired caregiver and family functioning and probable emotional neglect.

ANITA, AGE 15

Anita[1], who committed suicide at age 15 by ingesting a variety of toxic substances, was raised by a single mother diagnosed with schizoaffective disorder, a serious mental illness characterized by major depression combined with psychotic episodes. Both depression and psychotic disorders are associated with significant problems in caregiving as well as with childhood psychopathology. Anita and her family first became involved with the child welfare system when Anita was 11 years old and the family was homeless. There were a number of contacts over the next several years, both regarding Anita's mental health issues and problems with the four other siblings in the family. When Anita made two separate suicide attempts over the course of a single weekend and her mother failed to seek mental health treatment for her, school personnel contacted Anita's mother and insisted that she seek an emergency psychiatric evaluation for her daughter.

When it was decided to admit Anita to a psychiatric facility, her mother reportedly reacted aggressively while shouting delusional remarks, resulting in an emergency evaluation for her as well. Despite ongoing efforts by the child welfare agency to supervise and support this family over the next several months, including two subsequent hospitalizations for Anita and referrals to in-home mental health programs, her mother remained consistently unable to monitor and appropriately intervene in her daughter's growing distress, including the final night of her life when Anita openly indicated her intention to commit suicide. As noted above, perhaps the single most consistent factor in completed suicide is previous attempts.[1]

This case illustrates the ways in which a compromised family system can deter a child from getting the help he or she needs. Although it cannot be said in retrospect that if Anita's family had been more supportive or better able to utilize the mental health system she would be alive today, it is evident that the lack of family support was a contributing factor to her distress and ability to seek and utilize help. This case also highlights the sometimes frustrating role of the child welfare agent who is unable to provide the family with needed services due to lack of responsiveness or engagement. Whether or not a more proactive role for child welfare and mental health services would have been helpful is unclear, however, in instances where families are either unwilling or unable to utilize needed services it can be argued that more active intervention on the part of the child welfare system may be warranted.

SONIA, AGE 16

Like Anita, Sonia was hospitalized twice for depression at age 14 when she expressed suicidal ideation. She was again admitted to a psychiatric hospital 18 months later, at the time testing positive for marijuana and barbiturates. She was discharged from the hospital to a youth shelter, but was ejected from the shelter after only a few days for violating curfew and going AWOL. Arrangements were then made for Sonia to stay with her maternal aunt as her mother and stepfather did not feel they could manage her behavior in their home. Approximately two weeks later, Sonia was dead from an apparent overdose of multiple illicit substances.

The child welfare agency first became involved with Sonia and her family eight years earlier when her father was reported for aggressive behavior when he was denied access to Sonia at school, at her mother's request. Over subsequent years, Sonia moved back and forth between (1) her maternal aunt's home, where she was alleged to have been sexually-abused by the aunt's boyfriend, (2) her paternal grandfather who was disabled and unable to adequately supervise her, (3) her biological father against whom the grandfather, his own father, took out a restraining order

[1] *The names of all youth and some descriptive characteristics have been changed to preserve confidentiality. However, the relevant details of the cases have been included.*

because of his violent behavior, (4) her maternal grandmother, and (5) her mother/stepfather, against whom Sonia had made allegations of physical abuse. Sonia's biological father and mother both had long histories of drug and alcohol abuse, although the mother had apparently achieved sobriety before marrying for the second time and having a subsequent child, age four at the time of Sonia's death. Sonia's life was marked by a pattern of instability and a parent who admitted to "not being there" for Sonia in her early years because of her alcoholism. This combination of factors placed Sonia at extremely high risk for psychopathology as well as potential suicide.

Sonia's story illustrates the interplay between a variety of risk factors including lack of a viable family support system, exposure to violence and abuse, history of depression, conduct problems and substance abuse. Her long pattern of unstable life circumstances and increasing level of distress leading up to her ultimate suicide made her especially vulnerable. Further, Sonia's case example demonstrates how rules which are often put into place to protect children, such as the shelter's curfew and other restrictions, can lead to children being abandoned by systems of care when they are in the greatest need. Often times, the same behaviors that may make it difficult to maintain a child in placement or sustain treatment, are the same behaviors that may be indicative of a child's growing state of distress.

HEATHER, AGE 16

Heather's death was ruled by the medical examiner as "undetermined" following an apparent overdose of over-the-counter medication combined with a pre-existing asthmatic condition. Heather and her mother were both significantly impaired by bipolar disorder, a mental illness second only to major depression in its level of suicide risk. This family had a history of physical abuse and neglect, marital violence, at least one reported maternal suicide attempt, and parental substance abuse problems. The family was involved with child welfare authorities in another state before moving to Connecticut, although information from that state about the family was not sought by the Connecticut child welfare system. What prompted a report of neglect by the paternal grandmother to Connecticut child welfare authorities was both parents' successive desertion of the children, leaving them in the care of the grandmother who was visiting for the summer. The mother apparently left with a paramour who had been living in the family home for some months, while the father left a few months later after Heather and her brother objected strenuously to the new girlfriend that the father tried to install in the home in the mother's place. The child welfare agency closed the case a month after the initial report on the grounds that the paternal grandmother was in the home as an appropriate caretaker and neglect could not be substantiated. Heather's death came approximately two weeks after the case was closed.

Heather's story is a good example of why valid screening and assessment measures can be helpful in determining if a child is at high risk for suicide. If the adverse childhood experiences measure previously described was applied in Heather's case, even without knowledge of the family's history in their previous home state, she would still score at least a 6 on the ACE scale (ACE scale indicates emotional abuse, physical abuse, substance abuse, mental illness, domestic violence, and separation/divorce). Scores as high as 6 or 7 on this scale indicate a much higher risk of potential suicide attempt (Dube, et al., 2001). Thus, although Heather may not have appeared to be at high risk for suicide based upon the presenting concerns, given her family history and current stressors she actually was extremely vulnerable.

It is not always clear or easy to identify who is at highest risk for suicide. Traditionally, children are treated for their presenting concern or immediate problems are addressed, such as placement or safety. However, as this case indicates, these same children may be at higher risk for suicide. With proper screening and consideration of both past and present risk factors, it may be possible to identify children who are at elevated risk and get them the help and support they need.

JIMMY, AGE 13

Jimmy, a fraternal twin, was also raised in a family that struggled with substance abuse and depression. His mother had a long history of using alcohol, cocaine, and heroin. His parents were never married, but when Jimmy was five, his father took custody of the boys after the child welfare agency investigated charges of neglect by the mother. He became their legal guardian at that time. Two years later, charges of neglect of the children were filed against the father by the maternal grandmother. A year later, the children were again living with their mother. Two years after that the father filed an abuse complaint against the mother's paramour, which was investigated and dismissed as unsubstantiated. By the time the twins reached puberty, Jimmy's twin brother was involved with the juvenile authorities. The Probation Division of Juvenile Court requested Family with Service Needs (FWSN) intervention for his brother, but not for Jimmy or the family as a unit. The case was assigned to a child welfare worker, but before a home visit could be made, Jimmy was found hanging in a closet during a family gathering.

It is evident, that like many children who take their own lives, Jimmy's family history of substance abuse, emotional difficulties, neglect and possible abuse were all strong factors that put him at great risk. Given what is known about concordance rates about a variety of psychiatric and behavioral difficulties among twins, the fact that Jimmy's twin brother was having behavioral difficulties is another potential red flag. This case further supports the argument that interventions directed to juvenile justice youth should include a comprehensive and intergenerational family assessment when possible and family treatment when indicated.

ANTHONY, AGE 18

Like Anita, Sonia, Heather and Jimmy, Anthony's early life was marred by both parents' drug use. His father died of a drug overdose when Anthony was four-years-old. He and his siblings were removed from his mother's care at one point during his childhood because of her drug involvement. Her ability to parent appeared questionable to the many agencies involved with Anthony. Several observers remarked that their relationship was more like siblings than parent and child. Indeed, when Anthony became a teenager and began skipping school and smoking marijuana, his mother seemed helpless to intervene. At age 16, he was admitted to a secure juvenile facility where he stayed for four months before being transferred to a residential treatment center, while being committed to the care of the state for 18 months. Although he apparently received few therapeutic services while incarcerated during the four months in the secure setting, he was diagnosed with major depression and placed on psychotropic medication. Records indicate there was no educational or vocational evaluation done while Anthony was in the secure setting, so upon discharge to the residential program, there were no long-term educational or vocational goals for this youth.

A year after being sent to the secure facility and following discharge from the residential program, Anthony was discharged to his mother's care, under the supervision of a parole officer from Juvenile Services, with outreach and tracking done through a private agency in Anthony's home community. According to case records, Anthony's mother and stepfather were themselves homeless during this time. Efforts to engage Anthony's family in the reunification process were ineffective, and records indicate that professionals made relatively few attempts to integrate the family in the treatment or intervention process. Anthony had two subsequent arrests for misdemeanors and failed to follow through on arrangements to participate in a weekly group or attend school regularly. Frequently, the parole officer was unable to locate Anthony for days or weeks at a time. Eight months after his discharge from the residential treatment center to his mother's care, at age 18, Anthony died after being struck by an ambulance while he was operating a motor scooter. He was found with a significant amount of crack cocaine in his possession at the time of his death that was reportedly packaged for distribution. According to case records, he had become a father just four days earlier.

Anthony's story highlights the fact that many children who become involved in the juvenile justice system also have had histories of parental substance use, neglect and exposure to trauma. Treatment provided by juvenile justice and child welfare agencies should include attention to these

issues and involve parents and other family members whenever possible. The multiple stressors that Anthony experienced led to a constellation of risk factors that made him more vulnerable to suicidality and risk-taking behavior. The lack of both parental involvement and engagement of systems of care may have also been strong contributing factors as to why Anthony was unable to obtain the help and support he so desperately needed.

CHARLES, AGE 16

Like Anthony, Charles, who committed suicide by hanging at age 16, was known to both the child welfare and the juvenile justice systems. Charles was placed at age 15 through the Juvenile Court in a residential treatment program as a status offender on a Family with Service Needs (FWSN) petition. Charles and his family were well known to child welfare authorities over an eight-year period because of reports of child maltreatment due to chronic parental substance abuse and intensive domestic violence. The family had received a variety of mandated and voluntary services over the years from the schools, the courts, mental health agencies, residential programs and others; however, these services were fragmented, crisis-oriented, and failed to address the systemic issues that plagued the family. One issue that was never directly addressed but is hinted at in the case file, was Charles's sexual orientation. In the course of his treatment, several professionals questioned the possibility that he might be struggling with his sexuality and he discussed his sexual identity conflicts with at least one clinician. As noted previously, youngsters who are struggling with homosexuality or bisexuality are at higher than average risk for suicide (Gould et al., 2003). For a youth like Charles whose father was a violent alcoholic, the idea of having a sexual orientation that his father would likely disparage could have been terrifying.

Although Charles's sexual orientation was not reason alone to suggest that he might be suicidal, given the other issues in his life, his father's disapproval and his history of exposure to substance abuse and domestic violence, he was at higher risk and likely would have benefited from more intensive and targeted assessment and intervention. Because children who are struggling with their sexual orientation or others' acceptance of them are already at a higher risk of suicide, those children who present with a range of other conflicts and issues in their lives should be assessed even more closely and provided with the appropriate intervention and support they need to better cope with their life circumstances.

WESLEY, AGE 13

The final case reviewed for this study initially appears quite different from the other six. This young boy who died by hanging at age 13 was at first glance a child of privilege whose family could provide him with all the support and services money could buy. A closer look at this upper-middle-class family, however, finds the same violence, abuse, and instability that characterized the other, less affluent families known to the child welfare authorities in this study. Wesley's parents were divorced after a stormy marriage marked by domestic violence when he was just a toddler.

Both parents remarried and his father moved to a very affluent community in another part of the state. Distance did not diminish the father's efforts to control the lives of his former wife and their three children, however. Throughout Wesley's young life there were repeated reports to the child welfare authorities by a variety of community agents and public citizens that the father had abused one child or another. Each time, the father would hire a lawyer and stymie an investigation, or seek to have findings against him overturned. Wesley, the youngest child and only boy in the family, seemed particularly vulnerable. He had learning problems in school, social and behavioral difficulties, and had on at least two prior occasions threatened to kill himself - once by jumping from the roof of a building. Wesley's death occurred approximately four months following an investigation against the father on charges of physically abusing the boy during a vacation in another state.

Wesley's story is a reminder that no child or family is immune to the risks of youth suicide. A combination of individual, familial, and contextual factors all can contribute to a child being at higher risk for suicidal thoughts and behaviors. Like many of the children reviewed in these brief case studies, Wesley appeared to be a child who had a long history of familial stress compounded by individual vulnerability

and possible exposure to abuse. Although it cannot always be predicted who ultimately will attempt or complete suicide, examining the child's past and current risk factors can help bring better intervention with children like Wesley, who found that the variety of stressors contributing to his unhappiness ultimately became too great for him to bear.

SUMMARY OF CASE FINDINGS

It is not difficult to identify the themes that run through all seven cases of completed suicide included in this review. Themes of child and parent substance abuse, child and parent emotional and psychiatric difficulties, child behavioral problems or involvement in the juvenile justice system, history of abuse or neglect, exposure to violence or other trauma, impaired family functioning, previous history of suicidality, escalation of symptoms or stressors prior to the suicide, and lack of access to or engagement in available services, are evident across these cases (see Table 2). Of all the themes that contributed to the risk factors for these adolescents, there were four that stood out in most of the cases. All of the cases reviewed revealed histories of exposure to violence or other trauma and impaired family functioning. These issues should be taken very seriously either alone or in combination with other risk factors when assessing children. Further, most of the cases included a history of parent emotional or psychiatric difficulties and lack of access to or engagement in services. In these cases, children who grew up in environments where their parents were impaired and were less likely to be able to provide them with adequate support or a stable environment (which ultimately impeded access to needed services) may have placed these children at much higher risk for suicide. As noted by a number of researchers in the area of youth suicide, it is not a single risk factor but an accumulation of risks that determines vulnerability to self-harm. The youth in these cases did not have just one or two risk factors in their backgrounds but as can be seen in Table 2, multiple factors that, in combination, placed them in harm's way.

With an increased awareness and knowledge of the types of histories and risk factors children who completed suicide demonstrated, practice can be better informed, including screening, assessment and prevention of at-risk youth being served by systems of care in Connecticut. One of the most sobering findings of this analysis is the ways in which systems of care either didn't recognize the risk of suicide in these youth or failed to be actively engaged or involved at the time of the child's suicide. These are children who, in many instances, despite best efforts, fell through the cracks of the network of care and considered suicide as a solution to their stressful lives and relationships.

TABLE 2
CASE STUDIES: RISK FACTORS OF SUICIDAL YOUTH

	ANITA (15)	SONIA (16)	HEATHER (16)	JIMMY (13)	ANTHONY (18)	CHARLES (16)	WESLEY (13)
Child substance abuse	•	•			•	•	
Parent substance abuse		•	•	•	•	•	
Child emotional/ psychiatric difficulties	•	•	•		•	•	•
Parent emotional/ psychiatric difficulties	•	•	•	•	•	•	•
Child behavioral difficulties or Juvenile Justice involvement		•			•	•	•
History of abuse or neglect	•	•	•	•	•	•	•
Exposure to violence or other trauma	•	•	•	•	•	•	•
Impaired family functioning	•	•	•	•	•	•	•
Previous history of suicidality	•	•	•			•	•
Escalation of symptoms/ stressors prior to suicide	•	•	•		•	•	•
Lack of access to or engagement in services	•	•	•	•	•	•	
DCF case active or inactive/ closed within 30 days of suicide/death	•	•	•	•	•	•	

SECTION 5:

PREVENTION OF YOUTH SUICIDE

PREVENTION OF YOUTH SUICIDE

Prevention programs aimed at preventing youth suicide take one of three approaches. General health promotion, or universal prevention programs, are aimed at a wide audience in the general adolescent population. Such programs are often school-based. Health promotion programs directed towards children and adolescents, particularly those that include affective education (e.g., the expression and awareness of feelings), have demonstrated success in reducing later problems. These programs are frequently part of a health curriculum at the secondary school level.

Selective prevention programs attempt to identify youth whose configuration of personal and social risk factors places them at risk for suicidal behavior, and to intervene with targeted strategies (Hayden & Lauer, 2000). Some selective prevention programs, often identified in the prevention literature as "gatekeeper" strategies, train teachers, mental health professionals, and peers to identify youth who are at greatest risk for suicide. Other selective prevention programs utilize general screening for depression and suicidality, followed by more specific clinical interviews, to identify students whose mental health places them at risk for suicide (Reynolds, 1990; Thompson & Eggert, 1999).

Indicated prevention programs focus on treatment of youth who have expressed suicidal ideation or have attempted suicide. As research shows that one of the most significant risk factors for a successful suicide attempt is a history of previous attempts, immediate identification and intensive intervention with youth who have made a suicide attempt and/or deliberate self-harm is critical in the prevention of youth suicide.

UNIVERSAL PREVENTION PROGRAMS

Suicide prevention programs adhering to the universal prevention strategy described above were widely implemented in public schools throughout the 1980s (Garland, Shaffer & Whittle, 1989; Goldsmith, Kleinman, Pellmar, & Bunney, 2002). In a review of programs implemented in 38 states and the District of Columbia, Garland and her colleagues (1989) found substantial growth in school-based suicide prevention programs in the mid 1980s in response to a spike in the overall suicide rate among adolescents and a series of group suicides that attracted a great deal of media attention. Examining the content of 115 programs, the authors noted that the majority endorsed a "stress" model in which otherwise healthy individuals might kill themselves in response to stressful events while only 4% of programs presented suicide as a possible outcome of mental illness.

More recent reviews of school-based prevention programs indicate that in many school districts, suicide prevention is not present in the curriculum, and where it does exist it is generally viewed as inadequate. For instance, a statewide survey of school personnel in Ohio indicated that only 20% of schools had a suicide prevention program (Wolfe, Mertker, & Hoffman, 1998). More than two thirds of the elementary, middle/junior high school and high school teachers surveyed indicated that they needed training in suicide prevention program strategies and more than half of the administrators indicated the same. Responding to the same question, a third of the counselors indicated that they needed training in suicide prevention, yet 87% reported that there was rarely an in-service provided on suicide prevention. Some resistance among school personnel was also observed, as 27% of the high school teachers indicated they were not willing to participate in a suicide prevention program.

In a study of all school districts in Washington, Hayden and Lauer (2000) drew similar conclusions about the dearth of suicide prevention programs and perceived resistance to implementing such programs throughout the state. Despite a statewide policy promoting suicide prevention, the majority of districts had no policies, procedures or programs. Hayden and Lauer (2000) found that there were several clusters of difficulties in the implementation of these programs: legal concerns, insufficient staff, lack of information/knowledge, lack of funding and scheduling flexibility, and the concern that there would be negative responses from parents and teachers. The potential negative responses of district administrators and building principals were perceived to be the least problematic impediments to program implementation. Kalafat and Elias (1995) suggested that much of the opposition to such programs was frequently based upon incorrect assumptions that discussions of suicide may lead to suicidal behavior.

Perhaps the most important barrier to the implementation of school-based suicide prevention programs has involved questions about their efficacy. Tests of the efficacy of such programs using rigorous experimental designs had been relatively rare, and among those that had been tested, results had not been promising; at best such programs appeared to be ineffectual. Canadian researchers summarizing the effectiveness of school-based programs published throughout the late 1980s and early 1990s concluded that the demonstrated effectiveness of such programs was not compelling enough to implement such programs in schools in that country (Ploeg, Ciliska, Dobbins, Hayward, Thomas, & Underwood, 1996).

SOS: SIGNS OF SUICIDE

An exception to the ineffectual legacy of universal programs is found in Signs of Suicide (SOS), a school-based prevention program developed by Screening for Mental Health, Inc., a non-profit organization in Wellesley, Massachusetts. Signs of Suicide combines a curriculum that aims to raise awareness of suicide and its related issues with a brief screening for depression and other risk factors associated with suicidal behavior. This program particularly focuses on two of the most prominent risk factors for suicidal behavior: underlying mental illness, particularly depression, and problematic use of alcohol.

In the didactic component of the program, SOS promotes the concept that suicide is directly related to mental illness, typically depression, and that it is not a normal reaction to stress or emotional upset (Jacobs, Brewer, & Klein-Benheim, 1999). The basic goal of the program is to teach high school students to respond to the signs of suicide as an emergency, much as one would react to signs of a heart attack. Youths are taught to recognize the signs and symptoms of suicide and depression in themselves and others and to follow the specific action steps needed to respond to those signs. The objective is to make the action step, ACT, as instinctual a response as the Heimlich maneuver and as familiar an acronym as CPR. This action step stands for Acknowledge, Care, and Tell. First, ACKNOWLEDGE the signs of suicide that others display and take them seriously. Next, let that person know you CARE about him or her and that you want to help. Then, TELL a responsible adult.

In the screening component of the program, students are asked to complete the Brief Screen for Adolescent Depression (BSAD), a screening instrument derived from the Diagnostic Interview Schedule for Children. The screening form is scored by the students themselves; a score of 4 or higher on the BSAD is considered a strong indicator of clinical depression, and the scoring and interpretation sheet that accompanies the screening form encourages students with such scores to seek help immediately.

According to the program's logic model, SOS aims to reduce levels of suicidal thoughts and behavior among adolescents through three primary mechanisms:

1. The educational component of the program is expected to reduce suicidality by increasing students' understanding of and promoting more adaptive attitudes toward depression and suicidal behavior.

2. The self-screening component of the SOS program enables students to recognize depression, problem drinking, and suicidal thoughts and behaviors in themselves, and prompts them to seek assistance in dealing with these problems. Such help-seeking need not be limited to referral for treatment by a mental health professional, which

is likely to be constrained by such factors as the availability and accessibility of providers, health insurance coverage, and social stigma, but should also be manifested in help-seeking directed at the "indigenous trained caregivers" in the school environment e.g., teachers, guidance counselors (Gullotta, 1987).

3. Both the educational and self-screening components of the program are expected to facilitate receipt of social support and help-seeking directed at peers. The focus on peer intervention is developmentally appropriate for the target age-group, as peers become the primary sphere of social involvement and emotional investment during adolescence (Aseltine, Gore, & Colten, 1994; Coleman, 1961). Peers are often the first to know that an adolescent is suicidal (Davis & Sandoval, 1991), and evidence indicates that about half of high school age girls and almost a third of high school age boys report knowing someone who has thought about suicide, made an attempt, or actually committed suicide (Overholser et al., 1989). By teaching youths to recognize the signs of depression and empowering them to intervene when confronted with a friend who is exhibiting these symptoms, SOS capitalizes on a key feature of this developmental period.

Evaluation of the SOS program to date has proceeded on two fronts. First, more than 500 site coordinators from schools participating in the program during the past two school years have provided feedback on the program through structured surveys (Aseltine, 2003). In general, the program and its materials have been very well-received. The vast majority of site coordinators reported that the program was effective in increasing help-seeking, in improving communication among students, parents, and teachers, and bringing students in need of help to the school's attention.

Of particular importance is the 150% increase in help-seeking among students who participated in the program during the 2001-2002 school year, as the number of students seeking counseling for depression or suicidal ideation increased from an average of 3.9 per month over the past year to 9.6 in the 30 days following the program's implementation. In addition, the program appears to have an excellent safety profile, as the vast majority of high schools reported no adverse reactions among students exposed to the SOS program.

During the 2001-2002 school year, several high schools also participated in a student-level evaluation of the program which examined the effectiveness of the SOS prevention program in increasing students' knowledge of and fostering more constructive attitudes toward depression and suicide, in promoting help-seeking among troubled students, and in reducing suicidal behavior (Aseltine & DeMartino, 2004). Approximately 2,000 students in five high schools in Columbus, Georgia and Hartford, Connecticut were randomly assigned to the treatment group, which received the SOS program in the fall of 2001, and the control group, which did not receive the program. Brief self-administered questionnaires were completed by students in both experimental groups approximately three months after program implementation.

Significantly lower rates of self-reported suicide attempts were observed among students in the intervention group relative to the control group in the three months following exposure to the program ($p < .05$). Significantly greater knowledge and more adaptive attitudes about depression and suicide were also observed among students in the intervention group, and these variables partially explained the beneficial effects of the program on suicidal ideation and suicide attempts. However, significant effects of the SOS program on help-seeking behaviors were not observed in this sample.

As a result of these studies, SOS has been designated a "promising program" in SAMHSA's National Registry of Effective Programs, the only school-based universal suicide prevention program to receive this designation. Signs of Suicide demonstrated that it reduced suicide attempts and holds great promise for actually preventing youth suicide.

In contrast to the success of SOS, studies examining the effectiveness of other suicide prevention curricula have been able to demonstrate little more than short-term improvements in knowledge and attitudes about suicide. Nelson (1987), for instance, investigated a four-hour

prevention program that had been implemented in eight schools in California. A follow-up evaluation of approximately 370 students revealed a significant improvement in measures of attitudes and knowledge from pre-test to post-test. Similar results are reported by Ciffone (1993). Ninth-grade students from a single school in Illinois were exposed to a two-day suicide prevention program as part of a health class. A health teacher introduced the topic of suicide prevention followed by a video and classroom discussion presented by the author, the school's social worker. Ciffone evaluated the program by administering an eight-question survey one day prior to the program and again 30 days after the program to members of the experimental group (n=203) and a control group who had not been exposed to the program (N= 121). Ciffone addressed a concern that linking suicide to mental illness would discourage students from seeking help due to the fear of stigma. He found that 78 of 88 students changed their opinion in the post-test- that is, they learned suicide was in fact related to mental illness - and that these students were more likely than those who had not changed their opinions to seek professional help.

Overholser and colleagues' (1989) evaluation of a suicide awareness curriculum also found some modest changes in attitudes, yet here results varied considerably by gender. Two schools implemented a curriculum that was delivered in five consecutive health classes (n=215) and students from a third served as a control group (n=256). The researchers found that there was a significant difference between girls and boys with regard to their experiences with suicide. Specifically, 48.2% of the girls and 21.1% of the boys surveyed knew a peer who talked about killing him/herself. At baseline, students who had personal experiences with a suicidal peer also had more negative attitudes than those who had no such experience. In the post-test evaluation four weeks after exposure to the curriculum, these same students learned the most in a measure of content knowledge.

On measures of attitude change, all of the students who had exposure to the curriculum improved their negative attitudes about suicide, with the exception of boys who had a personal experience with a suicidal peer. In fact, boys appeared to be negatively affected by the program. Boys' scores on a measure of hopelessness increased after exposure to the curriculum as did their scores on a measure of maladaptive coping responses, whereas girls improved on that measure. The authors concluded that given the very different responses to the curriculum, gender-specific suicide prevention programs may be more effective and pose less of a concern about potential negative effects.

Two studies from Israel also revealed modest effects of suicide prevention programs on knowledge and attitudes about suicide, as well as gender differences in responses to these programs (Klingman & Hochdorf, 1993; Orbach & Bar-Joseph, 1993). These programs were derived from psychodynamic theories aimed at strengthening ego identity and cognitive behavioral strategies, and administered by school counselors and psychologists.

In the first study, 116 eighth-grade students were exposed to a small-group intervention that consisted of seven two-hour units (Klingman & Hochdorf, 1993). The program included empathy training, self-efficacy and self-control strategies and peer support in a three-phase process, which progressed from educational/conceptual, skills acquisition and rehearsal/application. The 116 youths randomly assigned to the experimental group were compared with 121 students who were given an alternative psycho-educational program. Although there were no differences between the two groups on a measure of loneliness, Klingman and Hochdorf found that the experimental group did significantly better on measures of coping skills and knowledge about suicide following exposure to the program. The authors also found that girls improved more on a measure of empathy and boys had a greater improvement on a measure of suicide potential.

A second program based on dynamic group therapy strategies utilized introspection, targeted coping strategies, and the exploration of feelings and experiences related to suicidal tendencies (Orbach & Ben Joseph, 1993). The semi-structured group "workshops" were based on seven required and one optional topic: 1) depression and happiness 2) the adolescent and his family, 3) feelings of helplessness, 4) coping with failure 5) the personal perspective on coping with stress and problem solving, 6) coping with suicidal urges 7) summary and feedback and 8) (optional) separation

and loss. In each of the semi-structured meetings, the students responded to questions about their experiences (e.g., "What kinds of problems arose between you and your family?"), about how they worked through the experience (e.g., "How do these feelings change over time?"), and about their coping efforts (e.g., "What would you change about the situation/yourself?"). Students from six different high schools were part of the study with schools assigned to experimental and control groups. The authors found that there were different reactions to the programs based upon the school, particularly in the one special education school. In general, those who scored higher on a measure of suicide potential showed the greatest improvements on a measurement of hopelessness. In two of the schools, girls made greater improvements on the suicide potential and hopelessness measures than boys.

In one of the few studies examining the impact of a suicide prevention program on suicide rates, Zenere and Lazarus (1997) reported results from a comprehensive program implemented in Dade County, Florida. Educators in Dade County implemented a pre-K-12 comprehensive developmental guidance program entitled TRUST. The pre-K-5 program focused on drug education, communication and decision-making skills. In sixth grade, the program shifted to a mental health focus, with suicide as part of the 10TH grade curriculum. The extent to which this program reduced suicidal behavior was assessed by comparing death rates by suicide in Dade County in the five years following the program with those in the 15 years preceding implementation. In the five years after implementation of this program, the rate of suicide decreased to 4.6 per year from an average of 12.9 suicides per year between 1980 and 1994. Although promising, the design of this study made it difficult to rule out myriad other explanations for the declining suicide rates in this area. Greater confidence in the efficacy of this program in reducing suicidality requires a more rigorous experimental design.

In contrast, disappointing findings were reported by Vieland and colleagues (1991) in their evaluation of a suicide prevention program in suburban/rural schools in New Jersey developed as part of a demonstration project of the State Education Authority of New Jersey. This program was implemented in one and a half hours by regular classroom teachers. The authors found no significant differences between experimental (N=174) and control groups (N=207) on a survey assessing depression, peer depression, suicidal ideation, and help-seeking behavior 18 months after implementation.

Kalafat and Elias (1994) reported mixed results in their evaluation of another suicide prevention program in New Jersey. The program utilized three 40 to 45 minute classes and included an informational video and the distribution of a wallet card containing hotline information. The first lesson focused on information about suicide, attitudes toward suicide, and the tunnel thinking produced by extreme stress; the second lesson focused on warning signs and an exercise, and role play underscoring the seeking out of adult help; the third lesson included a video that emphasized the consequences of failing to respond to a suicidal peer, the review of school-based resources and the distribution of a wallet card with information and a local crisis phone number. The authors utilized a Solomon four-group design involving 253 10th grade students. They found significant improvements in knowledge and effective helping strategies among members the experimental group, but found no group differences on two of the attitude questions about the reasonability of suicide as an option and confidence in peer intervention.

When examining these studies that review a variety of universal suicide prevention programs, results are mixed overall. In most cases, improvement in some domains was observed, particularly in knowledge and awareness, but it is unclear what real impact these programs had on actually preventing suicide with at-risk youth. However, the recent success of the SOS program in curtailing suicide attempts suggests that universal prevention strategies can be successfully implemented and provides strong evidence that school-based prevention can be a powerful tool in addressing this problem.

SELECTIVE PREVENTION PROGRAMS

Selective suicide prevention programs have been developed to address groups of youth that have been found through research to be at particular suicide risk. For example, the growing awareness of underlying mental illness as a proximate cause of suicidal behavior has resulted in greater use of mental health screening tools to target suicide prevention activities to high risk youth.

TEEN SCREEN

Columbia University's TeenScreen is a well-known program that seeks to ensure that all youth are offered a voluntary mental health check-up before leaving high school and to promote early identification of mental health problems (http://www.teenscreen.org).

Mental health screening involves a two-step process: youths first complete a brief screening instrument, and those whose scores are indicative of a possible problem are referred for more in-depth clinical evaluation. Screening can take place in any number of venues, including schools, clinics, doctors' offices, and juvenile justice facilities. Parents of youth found to be at possible suicide risk are notified and assisted in identifying and connecting to local mental health services.

Studies of the Columbia TeenScreen Program involving nearly 2,000 high school students indicated that it was effective in identifying youth at risk for suicide who were not receiving treatment (Scott et al., 2004). However, no formal studies of the effects of TeenScreen in actually reducing suicidal behavior have been conducted to date, and there are questions concerning the affordability, sustainability, and appropriateness of these types of screening programs (Coyne et al., 2000).

TARGETED PROGRAMS FOR SCHOOL DROPOUTS

School dropouts are considered a high risk group because they are often socially-isolated, frequently use drugs and alcohol, and often have learning difficulties as well as mental health problems - all factors associated with high suicide potential. To target this population, Eggert and colleagues (2002) developed and evaluated two different suicide prevention programs for potential high school dropouts.

In this study, students from seven different high schools who were identified as potential dropouts were assigned to one of three groups: Counselors Care (C-Care) (N=117), an individual assessment and a crisis intervention approach consisting of a single one-and-a-half, two-hour counseling session and social connections intervention with parents and school personnel; Coping and Support Training (CAST) (N=103), a 12-session coping and skills training following the aforementioned screening; and a usual care group (N=121) which involved a 30-minute assessment and social connections intervention.

All three groups were evaluated for suicide risk behaviors, depression and drug involvement at baseline, four weeks after the intervention, and again 10 weeks after the intervention. All three groups showed significant reductions in thoughts, threats and attempts of suicide, depression and frequency of drug involvement. Students in the two experimental interventions experienced a greater reduction in depression scores. Furthermore, CAST, the more comprehensive intervention, was associated with greater reductions in alcohol and drug use.

TARGETED PROGRAMS FOR NATIVE AMERICANS

Culturally-tailored suicide prevention programs for Native American youth have shown success in reducing rates of suicidal behaviors (Howard-Pitney, LaFromboise, Basil, September, & Johnson, 1992; MMWR, 1998). Native American youth have the highest suicide rates of any racial or ethnic group in the United States. A "natural helpers" program utilizing trained peer support counselors was implemented in a Western Athabaskan tribe in New Mexico (MMWR, 1998). This program may be classified as a "targeted" intervention because it focused on a specific cultural population, however, it should be noted that the program was applied as a "universal" prevention program to all students in the school. The program included prevention of alcohol abuse, child abuse and violence between partners. Peer counselors were trained to respond to youth in crisis and notify mental health professionals in appropriate situations. Outreach to families following suicide or traumatic death, immediate responses and follow up for at-risk youth, and screening for suicide in mental health and social service programs were included in the comprehensive response services.

Suicide attempts and completions were assessed by a surveillance instrument developed by the Indian Health Service. The rate of suicide among 15 to 19-year-olds in this community was 59.8/1000 in 1990 prior to implementation of the prevention program. In the subsequent six years, the suicide rate among members of this age group averaged 11.65/1000, while the suicide rate among other age groups within the tribe did not vary significantly. Additional school-based programs designed to address the needs of Native American youth have been implemented (LaFromboise, 1995; Middlebrook, 2001), but there has been little systematic evaluation of such programs.

TARGETED PROGRAMS FOR DELINQUENT YOUTH

As described in the previous case review section, youth in the juvenile justice system are an especially high risk group for suicidal behavior. Targeted prevention strategies for youth in the juvenile justice system tend to be limited to screening for mental disorders. "Emergent risk" or "reception" screening within the first few hours of the youth's contact with the system, and certainly within the first 24 hours, are frequently done for safety reasons (Wasserman et al., 2003). The focus is on identifying youth who are a danger to themselves or others. Following initial screening, a full clinical assessment with diagnosis and treatment planning may be carried out by trained and licensed clinicians to make sure that young people receive appropriate services for the duration of their stay in the juvenile justice system.

Wasserman and colleagues (2003) argue that a follow-up screening and evaluation at discharge from detention is essential to promote continuity of care and to ensure appropriate links with the mental health system. The authors noted the availability of several evidence-based general screening tools, such as the Youth Self Report (Achenbach, 1991) and the Brief Symptom Inventory (Derogatis, 1994). The Massachusetts Juvenile Justice System developed its own screening instrument, the Massachusetts Screening Instrument-Second Version (MAYSI-2), which is now widely used to screen detained youth nationwide (Grisso et al., 2001). This instrument contains 52-item screening measures designed to identify youth with potential mental, emotional, or behavioral problems, and includes specific questions about suicidal ideation. The scale has an adequate sensitivity (65%-75%) and specificity (70%-90%).

Section 5:

TARGETED PROGRAMS FOR FOSTER YOUTH

Youth in foster care are at enormous risk for the development of serious mental health problems and suicidality (Rosenfeld et al., 1997; Charles & Matheson, 1991). Many of the primary risk factors for depression and suicidal behavior among youth - e.g., family dissolution, family conflict, sexual and physical abuse - typically constitute the principal reasons for foster care placement. Family reunification, a legislative priority in many jurisdictions, does not appear to offer a solution, as a recent study found higher levels of self-destructive behaviors and internalizing problems among children reunited with their parents compared with those remaining in foster care (Taussig et al., 2001).

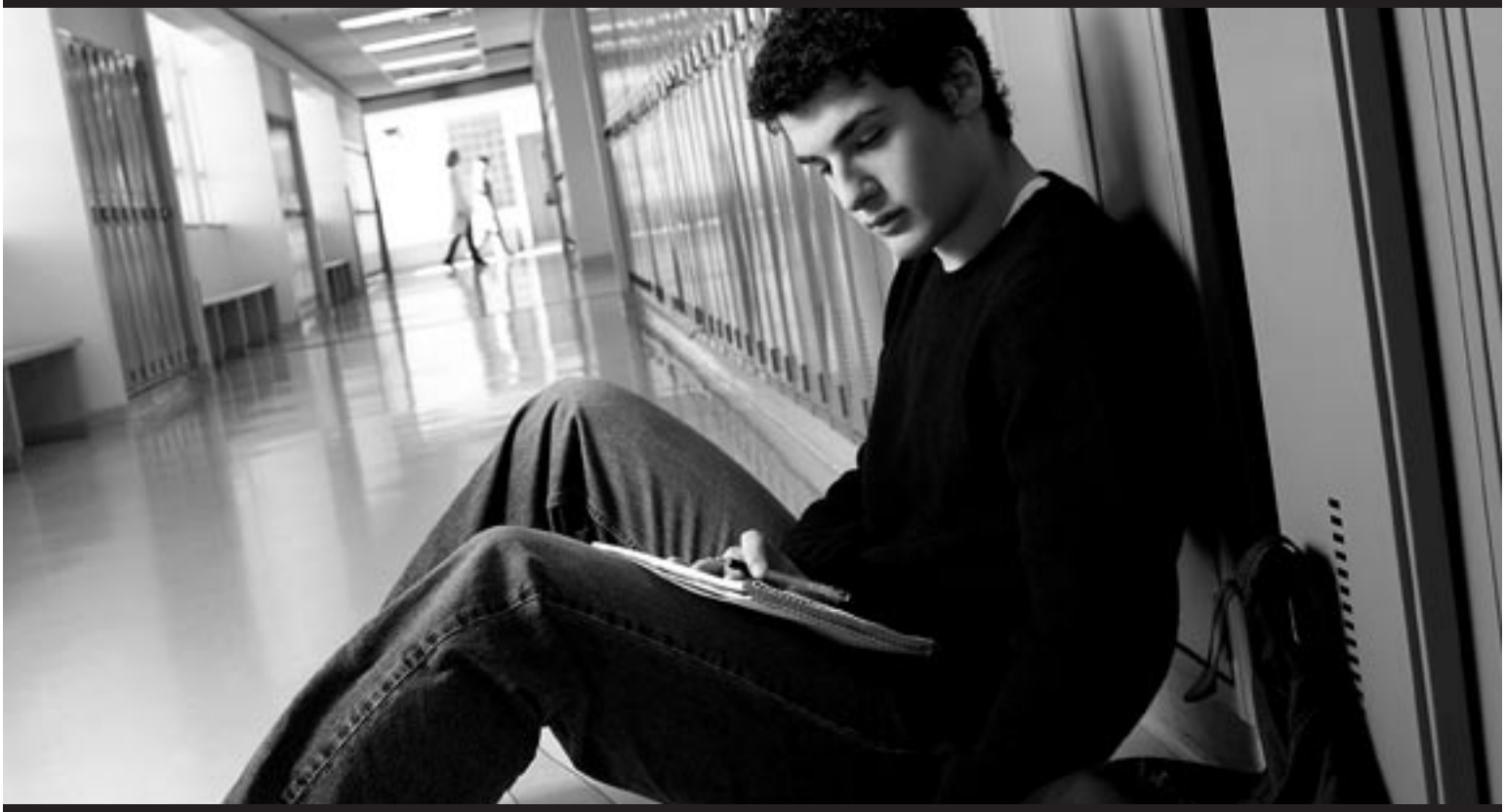
Given the documented problems of youth in foster care, the dearth of prevention activities specifically targeting suicide in this population is surprising. A comprehensive literature review involving a number of electronic databases including PubMed, PsychInfo, and Social Work Abstracts, not only revealed very little discussion of this topic in the academic literature, but no formal prevention programs for this population.

As documented above, the vast majority of youth suicide prevention programs are designed to be administered in schools to take advantage of the "captive audience" this environment provides, and to capitalize on the availability of appropriate resources (i.e., teachers, counselors) for delivering didactic programming. Although this should continue to be an important component of suicide prevention efforts for youth in foster care, additional strategies are clearly warranted for those whose residential instability make it difficult for schools to deliver and support these programs effectively. In this case, family-based prevention programming, particularly involving the education and training of foster parents to recognize, monitor, and respond appropriately to the signs and symptoms of depression and suicidality, may prove more effective (Charles & Matheson, 1991).

Based upon the reviewed programs, it is evident that the research supporting the efficacy of targeted prevention programs varies, but there is some strong support that these types of prevention efforts may be very useful and have positive outcomes. Targeted prevention programs with empirical support, such as the CAST program, should be seriously considered as a prevention strategy, particularly when targeting specific at-risk populations.

SECTION 6:

INTERVENTION AND POSTVENTION



Section 6:
Intervention and Postvention

INTERVENTION

YOUTH–FOCUSED INTERVENTIONS

Empirical studies estimate approximately 5% of children and adolescents suffer with diagnosable major depression (Birmaher et al., 1996), the major risk factor for suicidal behavior, yet fewer than 20% of children and teenagers with depression receive any form of treatment. Unfortunately, guidelines for treatment of suicidal behavior among adolescents have evolved via practice parameters rather than a large body of clinical treatment outcome research (Goldman & Beardslee, 1999).

PSYCHOTROPIC MEDICATION

Use of antidepressant medication in children and adolescents has expanded dramatically over the past decade, but remains controversial (Weller et al., 2005). Clinical studies of selective serotonin reuptake inhibitors (SSRIs) with children and adolescents showed that they may have limited efficacy in this population (March et al., 2004). A recent review of evidence by a Food and Drug Administration panel found small but statistically significant increases in suicidal thoughts and behaviors among youth taking antidepressant medication (Newman, 2004), leading to a recommendation for inclusion of a "black box" warning on SSRIs for pediatric use. Thus, there is some concern that the use of antidepressant medication in depressed or suicidal youth may actually increase their risk for suicidal thoughts and behaviors.

One of the common symptoms of depression is a loss of energy. In treating depression with medication, the return of energy routinely occurs before mood improves. In that period, usually the first weeks of treatment, there may be an increased risk of suicidal thinking and behaviors. This well-known risk should lead to improved informed consent in medication treatment of depression and closer monitoring of patients on such medications.

There is also evidence suggesting that reduced use of antidepressant medication for youth appropriately diagnosed would also likely increase suicidal behavior. Data suggesting increased risk of suicidality are countered by evidence from two recent ecological and retrospective cohort studies which found increased use of antidepressants to be associated with reduced risk of suicidal behavior (Olfson et al., 2003; Valuck et al., 2004). In addition, Brent (2001) noted that the increased use of antidepressant medication in children and adolescents over the past decade has been accompanied by substantial declines in suicide rates among 15 to 24-year-olds. Consequently, Brent argued that despite the complex and somewhat contradictory evidence, the benefits of antidepressants for children and adolescents outweigh the risks.

THERAPEUTIC INTERVENTIONS

According to the American Association for Child and Adolescent Psychiatry (AACAP) Practice Parameters for Assessment and Treatment of Children with Suicidal Behavior (2001), Cognitive Behavioral Therapy (CBT), Interpersonal Psychotherapy for Adolescents (IPT-A), Dialectical Behavioral Therapy (DBT), psychodynamic and family therapy are all appropriate therapeutic treatment options for the children and adolescents with suicidal behavior.

The best known and most extensively researched group intervention recommended by AACAP, Dialectical Behavioral Therapy, was pioneered by Linehan (1993). This treatment was initially developed to address some of the more challenging behaviors of individuals with Borderline Personality Disorder (BPD), including self-harm. There are several excellent reviews of research examining the efficacy of this treatment (see Koerner & Dimeff, 2000; Robins & Chapman 2004; Scheel, 2000). Although some have critiqued the methodology used to assess the efficacy, its success in reducing self-harm has attracted the attention of clinicians working in forensic settings (Berzins & Trestman, 2004) with suicidal youth (Rathus & Miller, 2002). However, the generalizability of utilizing DBT outside of BPD populations is still being examined. Further, DBT appears to reduce self-harm behaviors, but in BPD patients these behaviors are not often associated with successful suicides.

If psychotherapy is as effective, or more effective, than medication, it would be logical to choose that method preferentially. While this is often appropriate for adults and for some children, new studies comparing psychotherapy, medication, both, or neither in adolescents with major depression have found mixed results for the exclusive use of psychotherapy. While several studies have found psychotherapy to be effective in reducing depressive symptoms (Asarnow, Jaycox, Duan, LaBorde, Rea, et al., 2005; Brent, et al., 1999; Brent et al., 1997; Mufson et al., 2004; Clarke et al., 2001), most have found a combination of psychotherapy and medication to have superior efficacy. Moreover, the benefits of psychotherapy may be restricted to moderate depression (Harrington et al., 1998) and thus may not be manifested among suicidal youth. While these data are far from conclusive, it does suggest that there is no simple way to replace the potential benefits of medication treatment for depression in youth.

INPATIENT TREATMENT

The connection between suicidal youth and helping professionals is hampered by the fact that youth experiencing suicidal crises are less likely to express help-seeking intentions (Carlton & Deane, 2000). The first phase of intervention is to place youths in a highly-structured environment such as a hospital psychiatric unit that is made physically safe by restricting access to means of self-harm. Rudd and Joiner (1998) noted that recurrent evaluation of the need for hospitalization is essential. "No harm" contracts may be employed at this point in treatment.

Frequent re-evaluation of suicide risk and treatment plans and goals, with specific attention to reduction in frequency, intensity, duration and/or specificity of suicidal ideation, is recommended. Reducing feelings of hopelessness, improving problem solving/adaptive coping, and increasing self-control are a high priority for this population. Continuous access to a primary clinician and/or a backup is essential, as situations with youth in crisis evolve rapidly and the clinical team must be ready for rapid response and intervention. Furthermore, the clinical team's heightened state of readiness underscores the urgency and seriousness of the situation for patients and their families (Rudd & Joiner, 1998).

The limitations of inpatient treatment are primarily related to the fact that this treatment is typically short-term and may stabilize the youth for a period of time but not necessarily lead to sustainable long-term positive outcomes. Discharge planning is essential following inpatient treatment. If the child is discharged without appropriate services or support in the home, school or community, his or her chances of a successful outcome are greatly diminished. Further, developing a transition plan for a child who was monitored constantly in an inpatient setting compared with a child who might only be observed periodically on an outpatient basis is also crucial. Inpatient treatment may be an excellent short-term alternative to stabilize a child in crisis, but is not a replacement for ongoing continuity of care.

FAMILY-BASED INTERVENTIONS

Evaluation and, where indicated, supportive intervention with the family of the troubled child or adolescent is essential. As discussed above, threats to physical and emotional safety, lack of appropriate structure, and maladaptive family dynamics may contribute to the exacerbation of depression and precipitate suicidal behavior (Goldman & Beardslee, 1999). Recognizing these problems and working with the family to make necessary changes may help to substantially reduce the ongoing stresses that can worsen a child or adolescent's major depression. These issues must be addressed prior to the return of the child who is hospitalized to the family/home setting.

One treatment for adolescent mental illness, Multisystemic Therapy (MST), qualifies as a family-based intervention. The approach has emerged from ecological perspectives on the treatment of mental illness that depict the child as embedded in, and to some extent inseparable from, the larger family system. Of the family therapy options noted in the AACAP 2001 Practice Parameters, home-based MST has demonstrated some effectiveness with youth in psychiatric crisis. In a study of 116 families with children

in psychiatric crisis (Henggeler, Clingempeel, Brondino, & Pickrel, 2002), MST was more effective than hospitalization at decreasing youths' externalizing symptoms based upon caregiver and teacher reports. Those receiving MST treatment also reported higher levels of family cohesion and better school attendance. The two groups did not differ in self-reported emotional distress and caregiver and teacher reported internalizing problems (note that of those in the MST condition, 44% were hospitalized at some point in the study; however, the MST team maintained clinical responsibility and efforts were made to "insulate" these youths from typical therapeutic activities, such as group or recreational therapy, on the inpatient unit). However, this research does not specifically address the utility of MST in addressing suicidal ideation or behaviors.

A recent study of African American youth also reveals the promise of MST for treating severe psychiatric illness. One hundred fifty-six youth at risk for suicidal or homicidal behavior or psychosis were randomly assigned to hospitalization or MST treatment during evaluation for hospital placement (Huey, Henggeler, Rowland, et al., 2004). In the 16-month follow up period, MST was more effective than hospitalization in reducing future suicide attempts. Youth in the MST group also reported more rapid relief of depressive symptoms, but there were no long-term differences between groups in either depressive symptoms or suicidal ideation.

The promising findings from this research are offset by other studies showing weaker and/or nonsignificant effects of MST. In their recent meta-analysis of this research, Curtis, Ronan & Borduin (2004) concluded that MST had demonstrated larger effects on measures of family relations than measures of individual adjustment or peer relations. These authors cautioned that "more empirical support is required before MST can be considered an effective treatment of substance abuse in adolescence or an effective community-based alternative to the hospitalization of youth presenting for psychiatric emergencies." Further, as an evidence-based family oriented intervention, MST should be examined specifically for its outcomes associated with suicidal youth and its efficacy in reducing suicidal symptoms.

POSTVENTION IN YOUTH SUICIDE

In a comprehensive review of the literature, Jordan and McMenamy (2004) noted that postvention with survivors of suicide is an important clinical point of intervention, as the impact of a completed suicide sends ripples throughout the extended family and support network (Parrish & Tunkle, 2003). Female next of kin survivors participating in a telephone survey commonly cited concerns including family relationships, stress-related issues, and psychiatric symptoms (Provini, Everett & Pfeffer, 2000). However, only 25% reported having received formal or informal help after the suicide. The authors concluded that family members experiencing bereavement due to suicide were likely to avoid formal help due to perceived suicide-related stigma.

Although a number of bereavement interventions have been developed in the past decade, few specifically target intervention following suicide. A recent meta-analysis of 35 general bereavement interventions reported an overall effect size of .43 for these programs, which is markedly smaller than the effect size found in most psychotherapy outcome research (Jordan & McMenamy, 2004). However, as with most meta-analyses, this research compared a range of postvention interventions. Anecdotally, there is wide support for such interventions and further research should be conducted as to the efficacy of promising practice models.

POSTVENTION WITH FAMILY MEMBERS

Among the programs specifically targeting bereavement related to suicide, two support group programs appear promising. Pfeffer and colleagues (2000) reported findings from a support group intervention for children who had experienced the suicide of a parent or sibling. The bereavement intervention was offered in 10, one-and-a-half hour group sessions simultaneously to the parent group and the children's group. Theoretical models of attachment, response to loss, and cognitive coping were utilized in developing the intervention. Children in the intervention program showed significant decreases in anxiety and depression symptoms compared to those in a "treatment as usual group," although there were no significant differences in trauma or social adjustment scores.

Promising results are also reported by Murphy (Murphy, 1998; Murphy, et al., 2000), whose study of a 10–week support group intervention for bereaved parents who had lost a child to homicide, suicide or accident revealed a significant reduction in emotional distress and grief symptoms among mothers. The impact of this intervention may vary by gender, as fathers who participated in the intervention reported an increase in post traumatic stress disorder symptoms (Murphy, et al., 1998).

Finally, a journaling intervention in which students who had experienced the suicide of a loved one were directed to write about the event was associated with significant decreases in suicide-specific grief, trauma symptoms, and health care utilization (Kovac & Range, 2000). This intervention may be particularly helpful for males, who were less likely to disclose traumatic events to others.

POSTVENTION WITH HELPING PROFESSIONALS

If little attention has been paid in the literature to interventions with families responding to the completed suicide of a child, there is even less material available for helping professionals managing the suicide of a young client or patient. The available literature focuses primarily on the professional's response to a child's death due to illness or accident. Understandably, most of this literature comes from the health care field, particularly from nursing (Burr, 1996). The few studies or conceptual pieces relating to the experiences of human services providers regarding client death seldom include suicide, particularly of a child or youth (Gustavsson & MacEachron, 2000; Gustavsson & MacEachron, 2004). Critical incident stress debriefing (CISD) is the intervention strategy most often identified in the literature on intervention with child welfare workers and other human services providers. However, CISD and other debriefing models were designed specifically to be utilized with emergency care providers in post-disaster situations (although it is being applied in other settings with mixed results). Postvention and self-care of helping professionals is generally a widely-supported idea in the clinical community, but few models or widely-adopted practices exist. Oftentimes, if the clinician is involved in clinical supervision, this is where clinician debriefing and support occurs. However, many professionals, particularly those who work with high-risk or crisis-driven populations, are moving towards integrating postvention and self-care models into their clinical practice.

SECTION 7:

CARING FOR THE CAREGIVERS: THE CONNECTICUT DCF POSTVENTION APPROACH

Section 7:

Caring for the Caregivers:
The Connecticut DCF Postvention Approach

Within Connecticut, during the past two years the Department of Children and Families has made important changes in the structure of the Fatality Review and postvention process, in order to better understand, prepare and empower interdisciplinary staff in the field confronted by child fatalities and critical incidents such as adolescent suicide, or serious suicide attempts. The purpose of the revised process is to provide comprehensive case analysis and timely systemic consultation in the aftermath of a child fatality or critical incident. Underlying this framework is the assumption that a thoughtful and respectful response to a crisis has the potential to create meaningful opportunities for professional development, staff cohesion, and improvement in the day-to-day delivery of effective and integrated child welfare services.

The guiding principles and practices for the Fatality Review process are based on the understanding that a crisis or critical incident can happen anywhere, at any time, and can happen to the most experienced and sensitive professional. This interdisciplinary and systemic approach recognizes the personal and professional trauma associated with a critical incident such as adolescent suicide or a serious suicide attempt, and seeks to encompass a predictable methodology that emphasizes relevant fact-finding, organizational learning and the identification of key dimensions in case practice determined to be excellent, acceptable or in need of improvement. Moreover, the process is designed to be distinct from employee investigations conducted by human resources departments, which have tended to dominate the child welfare field across the country.

In April 2004, Connecticut's DCF contracted with the Child Welfare League of America (CWLA) to conduct special reviews, in conjunction with the Office of Planning and Evaluation, and Division of Research and Development. Through a competitive bidding process, DCF sought to develop a greater level of independence and technical assistance with an organization of national prominence, in order to link review of critical incidents in Connecticut with current interdisciplinary literature, applied child welfare research, and best practice standards across the country.

Figley (1995) defined "compassion stress" as the natural behaviors and emotions that arise from knowing about a traumatizing event experienced by a significant other, the stress resulting from helping or wanting to help a traumatized person. "Compassion fatigue" is used interchangeably with secondary traumatic stress disorder (STSD) and is considered the equivalent of post traumatic stress disorder (PTSD). The Department of Children and Families recognizes that child welfare workers and interdisciplinary professionals on the front lines will inevitably encounter trauma, in a similar fashion as those in law enforcement, emergency medical teams and those that work with trauma survivors - such as hospitals, mental health clinics and employee-assistance programs. Preventing and limiting the harmful affects of secondary trauma requires an organizational culture of safety, trust and team support.

The Fatality Review framework in Connecticut is integrated within the interdisciplinary decentralized structure, emphasizing preventive operations including:

- Psychoeducation and debriefing;
- Preparedness and estimations of exposure;
- Planning and development of clear protocols, and;
- Staff support and consultation.

These functions serve to validate and "normalize" the potential for critical incidents, offer standardized responses and interventions throughout the organization, and are flexible enough to address the unique quality of each circumstance. The process is comprised of a range of crisis intervention services that typically include: technical assistance from experienced professionals (desensitization, education, and training), individual crisis counseling, group debriefing, and post-incident referral for primary and secondary reactions to stress-related and trauma-based phenomenon. It is in this way that a state system charged with caring for the state's most vulnerable children and families works to minimize the occurrence of youth suicide and to reach out to families and other caregivers to help them better manage the aftermath of such an event.

Section 7:

These emerging practices supported by the State of Connecticut highlight the importance of providing support to providers who work with children and families. Every clinician and child professional is likely to share the greatest fear of losing a client to suicide. By working together through ongoing support and team building as well as structured postvention activities, those providers who work with the most difficult cases will be provided with the support and guidance they need to meet the needs of children and families, while hopefully avoiding stress and burnout that can lead to job dissatisfaction, decreased performance and staff turnover.

SECTION 8:

CONCLUSIONS AND RECOMMENDATIONS

Section 8:

Recommendations

RECOMMENDATIONS

It is clear from the review of the research literature on youth suicide as well as the case summaries presented in this report, that prevention must take place at multiple levels and at various points along the developmental continuum of children. Too often, children and adolescents who demonstrate multiple risk factors end up not getting the care they need or, because of life circumstances, not accessing care when it is available. Some recommendations for addressing the problem of suicide among youth known to the child welfare and juvenile justice systems would require major system changes in how the early needs of children and their families are identified and addressed. Other recommended changes are procedural, such as calling for more thorough screening and assessments of children and youth entering the child welfare and juvenile justice systems. Finally, some recommendations focus on workforce development, advocating additional training of those individuals who interact most closely with youth in care and custody, or who are returning home from such care.

1 IMPLEMENT EFFECTIVE PREVENTIVE INTERVENTIONS

The health and human services professions are confronted with unprecedented demands and expectations that require an extraordinary level of competence and commitment. The social, psychological, and physical needs of children at risk can be overwhelming, and appropriate care requires awareness and sensitivity to diverse issues related to culture, ethnicity, gender, race, sexual orientation, age, social class and the pervasive effects of trauma on the lives and relationships of vulnerable children, youth, and their families. Because the already burdensome needs of children and families involved with social services are amplified when a family is faced with a child's suicide, effective risk prevention can potentially avert the tragedy of suicide.

Recommendations:

- Identify best and evidence-based practices and programs for suicide prevention, such as the SOS model, and make them available to schools, community agencies, and service providers who work with high risk children and families;
- Implement interventions that seek to prevent or curtail the risk factors for suicidal behavior, (e.g., early interventions that identify families in which the primary caregiver suffers from mental health or substance abuse problems, or in which intimate partner violence is taking place);
- Continue funding and support for programs such as the Suicide Prevention Training offered by the United Way and Youth Suicide Advisory Board to communities, schools and professional groups;
- Allocate funds to the rigorous evaluation of preventive interventions, and direct funding away from programs and activities whose efficacy cannot be established;
- When implementing new programs or protocols, establish clear criteria and outcome measures for evaluating program effectiveness;
- Work with state agencies and government officials to implement the State of Connecticut's Comprehensive Suicide Prevention Plan prepared by the Department of Public Health (in particular, implement those strategies that benefit high-risk youth and families).

2 PROMOTE WORKFORCE DEVELOPMENT

Improved training and education of service providers in the identification, prevention, and treatment of suicidal behavior among children and youth is essential.

Recommendations:

- Work with universities and training academies to include suicide assessment, prevention, early intervention and treatment in curricula for clinical training and workforce development;
- Work with schools to identify programs and procedures for training staff and educating parents about suicide risk and identification;
- Provide advanced training to school psychology and counseling staff on screening and identification of at-risk students.

Although children and youth known to the child welfare or juvenile justice systems are at unusually high risk for suicidality, a thorough search of the literature produced no reference to any preventive programs or training specifically for child welfare or juvenile justice personnel, including foster parents, detention, parole, and probation staffs.

Recommendations:

- Systematic training of front line child welfare and juvenile services staff should be implemented regarding indicators of suicide risk in youth known to these systems;
- A training curriculum that incorporates risk indicators and procedures for their assessment should be developed, tested and implemented;
- Such a curriculum should also be used to train foster parents and the staffs of detention facilities and training schools, as well as community providers of mental health services who may be unaware of the special vulnerabilities of youth in the child welfare and juvenile justice systems.

3 IMPROVE SERVICE DELIVERY AND COORDINATION OF CARE

The case studies reviewed in this report demonstrate that a variety of systemic issues and missed opportunities may have contributed to negative outcomes for those children and families while in contact with the child welfare system. Fundamental changes are necessary to ensure that youth and their families receive appropriate services in a timely and consistent manner.

Recommendations:

- Ensure that service providers complete comprehensive assessments of at-risk children and families including full review of past histories and contact with past providers, as well as assessment of current presenting concerns that may place children at higher risk for suicide;
- Integrate suicide risk assessment into ongoing case supervision and consultation (supervision for professionals and agencies should include a focus on client strengths, greater awareness of cultural and systemic factors, and recognition of the professional's evolving skills and competencies);
- Incorporate expertise in domestic violence, evidence-based therapies, substance abuse and trauma into existing programs, in order to highlight contextual and culturally-informed assessments and interventions;
- Identify and implement programs within state agencies and providers that promote principles and practices of family-centered and collaborative care highlighted in literature and research;
- Ensure appropriate screening and referral mechanisms are in place for at-risk children;
- Create mechanisms to ensure that ongoing services are monitored for quality and effectiveness;
- Examine intra-organizational processes and dynamics on a continuous basis and address barriers that may impede the effective delivery of services;
- Create forums and procedures where agencies serving at-risk children can share information and collaborate to bring the best available care that is integrated and continuous to children and families;
- Improve communication, collaboration and care coordination with colleagues representing different agencies and professional disciplines;
- Empower clients and families by actively engaging them in service provision and educating them about available options within each aspect of the assessment, treatment, discharge and aftercare phases of intervention;
- Utilize local systems of care, managed service systems and local DCF Area Offices as a means of maintaining communication, collaborating on programs and services, and planning for funding to sustain programs;
- Provide on-going interdisciplinary consultation and collaboration with school leadership, communities and agencies involved with children, youth and families at risk for suicide and violence;

- Advocate for policies and legislation that support effective and respectful client-centered care at the dimensions of prevention, early intervention, treatment and postvention.

4 ADDRESS POST-CARE VULNERABILITY

An essential learning from the case review process was the psychological crisis that a return home from care, or a release from in-home family supervision, seems to generate. None of the cases of completed suicide or questionable death reviewed for this report occurred while a youth was in placement, either in a foster home or in a state-run institution. That is not to say that such incidents do not occur. However, it is striking that the incidents in this case review took place after supervision by state agencies had been withdrawn, and while the youth was living with members of his or her biological family. It is possible that oversight of a family by child welfare authorities provides a child some measure of assurance of protection. Once the family case is closed, that assurance vanishes and the already-vulnerable young person feels abandoned, unprotected and hopeless. This speaks to the need to ensure that:

- Multiple support systems for the child and family should be securely in place before a case is closed by child welfare services or juvenile probation;

- Discharge plans should include ongoing support services and a continuity of care that would allow the family to continue to access services when in need (in most of the cases reviewed for this report, community services were uncoordinated, families were consigned to long agency wait lists, and communication and collaboration among service providers was limited or nonexistent);

- Local KidCare systems of care coordination should be further developed to provide ongoing care management to these vulnerable families and children in the community.

5 STRUCTURED ASSESSMENT

It is strongly recommended that a structured assessment at case closing be conducted that addresses the factors that heighten a youth's vulnerability to suicide outlined in this report. These factors include:

- Child's current psychiatric functioning including an assessment of affective disorders, including depression, anxiety disorders, and bipolar disorder;

- Previous suicide attempts and deliberate self-harm;

- Use of drugs or alcohol;

- Struggles regarding sexual identity;

- Social isolation from peers and caring adults;

- Learning difficulties and a pattern of failure in school;

- Conduct problems, including status offenses such as truancy, curfew violations, and running away from home;

- A history of early physical and/or sexual abuse;

- Past exposure to trauma;

- Parental history of substance abuse or mental illness, particularly when the youth was an infant;

- A family history of domestic violence and relational instability;

- Caregiver loss, particularly in the child's earliest years;

- Current family functioning and availability of support.

As current research shows, these are the primary risk factors for youth suicide. They are also factors that characterize the histories of families and youth known to child welfare and juvenile justice authorities. Thus, it is imperative that the assessment include the presence of these factors when a youth is discharged from care, and that adequate systems and supports are established in response.

In order to ensure that such an assessment is made, it is recommended that an assessment tool be adapted or developed addressing each of these risk factors that can be used by the caseworker or parole officer to determine the level of suicide risk for a youth reunified with his or her family. Such an instrument would provide a structure for decision-making in the development of a clearly articulated aftercare plan.

6 ENHANCE POSTVENTION PROCEDURES

As is demonstrated by the brief section in this report on the topic of post-suicide intervention with surviving family members, friends, acquaintances, and professionals involved with a youth who has completed suicide, this is an area of practice that calls out for further development.

In Connecticut, the Department of Children and Families has pioneered efforts to respond to the needs of agency staff and community providers by organizing debriefing sessions to allow those who provided services to the youth and family to discuss their experiences and the lessons learned. Opportunities for individual counseling are offered to DCF staff through the agency's Employee Assistance Program. Each case of completed suicide or questionable death is also reviewed by an outside special review team to make recommendations to the agency regarding necessary program or policy changes.

Despite these local efforts, however, there is little literature and almost no research on postvention procedures with survivors of youth suicide to guide practice in this area. Evaluation of a clearly articulated and applied postvention model would greatly enhance the capacity of child welfare and juvenile justice systems to respond appropriately in such situations. Further, it is recommended that state agencies adopt a formal postvention strategy to support its workforce.

IN CLOSING

This report reviewed recent research and literature, examined case studies in Connecticut, and provided an overview of intervention and prevention strategies that address the problem of youth suicide. Clear problems emerged from this analysis that require ongoing attention and improvement. In order to address the disturbing problem of youth suicide, action is required by state agencies and providers of care. By working together, they can better (and earlier) assess risk factors and identify children and families in need of services and ongoing support.

The painful and tragic deaths of children and youth due to suicide reverberate through families, communities and social service agencies. Recognition of the critical relationships and interdependencies among these groups can help transform these tragedies into meaningful opportunities for learning, community cohesion, and improvement in the day-to-day delivery of effective and respectful services – those that generate hope, healing, collaboration and creativity.

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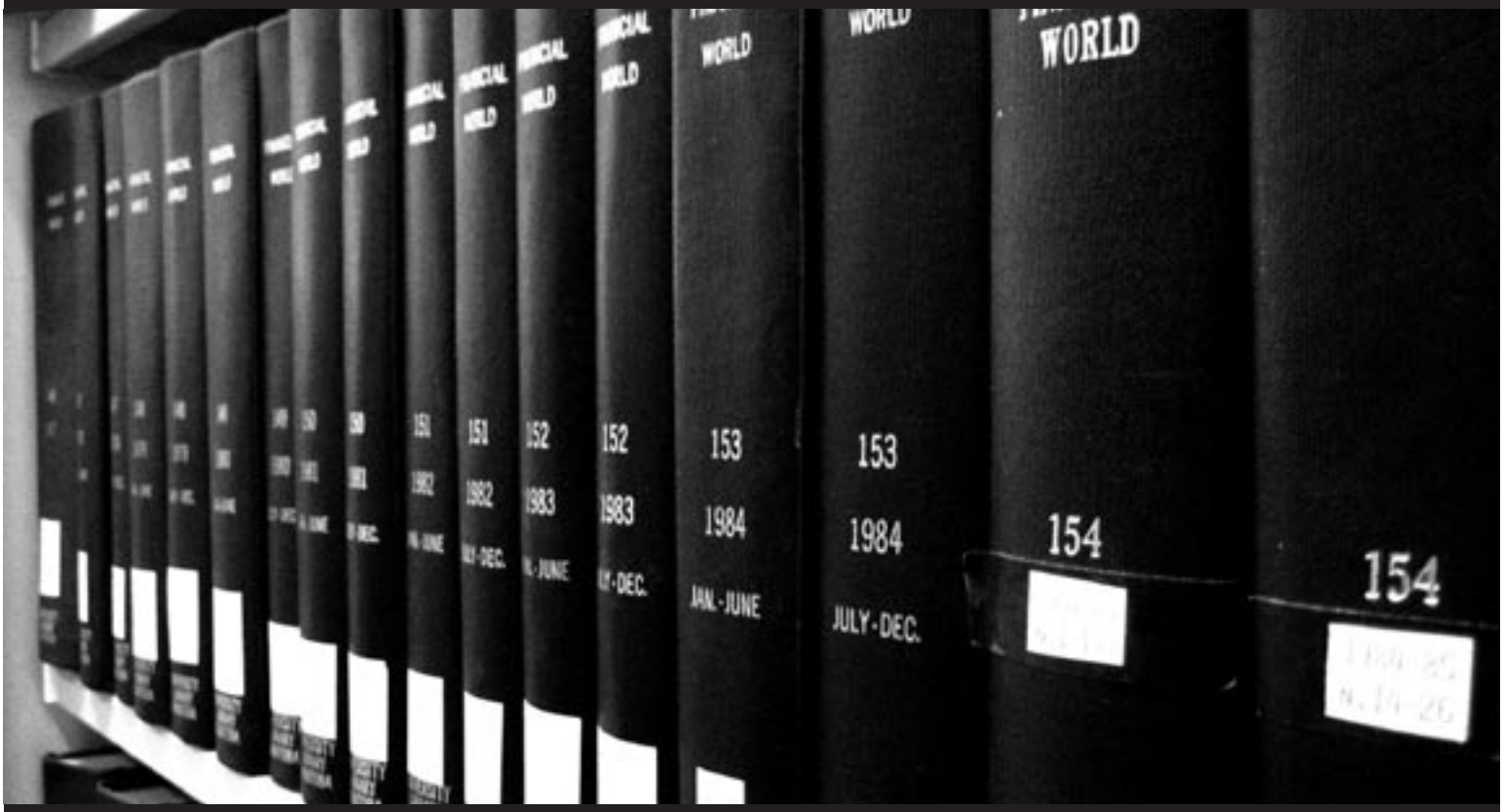

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