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Characteristics of Juvenile Suicide in Confinement

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According to the Surgeon General of the United States, youth suicide is a national tragedy and a major public health problem (Carmona, 2005; U.S. Department of Health and Human Services, 1999). The suicide rate of young people (ages 15 to 24) tripled from 2.7 per 100,000 in 1950 to 9.9 per 100,000 in 2001 (Arias et al., 2003). More teenagers die from suicide than from cancer, heart disease, AIDS, birth defects, stroke, pneumonia and influenza, and chronic lung disease combined (U.S. Department of Health and Human Services, 1999). In addition, a national survey found that more than 3 million youth are at risk for suicide each year, with 37 percent of surveyed youth reporting that they attempted suicide during the previous 12 months (Substance Abuse and Mental Health Services Administration, 2001).

Although youth suicide in the general population has been identified as a significant public health problem, juvenile suicide in confinement has received little attention. The Office of Juvenile Justice and Delinquency Prevention (OJJDP) awarded a contract to the National Center on Institutions and Alternatives to conduct the first national survey of juvenile suicides in confinement. The primary goal of this effort was to determine the extent and distribution of juvenile suicides in confinement (i.e., juvenile detention centers, reception centers, training schools, ranches, camps, and farms).

The study identified 110 juvenile suicides occurring between 1995 and 1999. Data were analyzed for the 79 cases that had complete survey information. Of these 79 suicides, 42 percent occurred in training schools and other secure facilities, 37 percent in detention centers, 15 percent in residential treatment centers, and 6 percent in reception or diagnostic centers.

The survey gathered descriptive data on the demographic characteristics and social history of each victim, the characteristics of the incident, and the features of the juvenile facility in which the suicide took place. Particular attention was paid to each facility's implementation of suicide prevention programming. This Bulletin presents findings from the survey and offers recommendations for addressing this tragic problem.

Victim's Demographic Characteristics

Race, Sex, and Age

More than two-thirds of the suicide victims identified in the survey were Caucasian.

A Message From OJJDP

Suicide is always tragic, but it is particularly so when the victim is young. The tragedy of young lives cut short by suicide poses a significant public health challenge. According to data from the Centers for Disease Control and Prevention, suicide is the third leading cause of death among youth 15 to 24 years old.

While experts recognize the need to intervene on behalf of vulnerable youth, little research has been conducted on the suicides of youth held in detention. To address this deficiency, the Office of Juvenile Justice and Delinquency Prevention has sponsored the first national survey of juvenile suicides in confinement.

This Bulletin examines 110 juvenile suicides that occurred in confinement between 1995 and 1999. It describes the demographic characteristics and social history of victims and examines the characteristics of the facilities in which the suicides took place. Drawing on this data, the researchers offer recommendations to prevent suicides in juvenile facilities.

The findings reported in these pages present serious challenges for healthcare and correctional professionals who work with confined youth and for administrators charged with ensuring the security and safety of youth in detention. Preventing juvenile suicides in confinement is a critical responsibility. The information provided in this Bulletin is intended to inform such endeavors.

About the Survey

In August 1999, the National Center on Institutions and Alternatives was awarded a grant from the Office of Juvenile Justice and Delinquency Prevention to conduct the first national survey on juvenile suicide in confinement.[a] The primary goal of the project was to determine the extent and distribution of juvenile suicides in confinement and to gather descriptive data on the demographic characteristics of each victim, the characteristics of the incident, and the characteristics of the juvenile facility that sustained the suicide. A report of the survey's findings would serve as a resource for juvenile justice practitioners to expand their knowledge and for juvenile correctional administrators to create and/or revise policies and training curriculums on suicide prevention. Data collection occurred in two phases.

Phase 1

During phase 1, a one-page survey instrument and cover letter was sent to directors of 1,178 public and 2,634 private juvenile facilities in the United States.[b] Each of the 3,812 facility directors was asked to complete the survey if the facility experienced a juvenile suicide between 1995 and 1999.[c] Similar to OJJDP's Conditions of Confinement study (Parent et al., 1994), the project surveyed facilities that housed juveniles in more traditional types of confinement—juvenile detention centers, reception centers, training schools, ranches, camps, and farms—operated by state and local governments and private organizations.[d] Excluded from the project were open, physically unrestricted residential programs for juveniles such as shelters, halfway houses, and group homes. Phase 1 identified 110 juvenile suicides occurring between 1995 and 1999. The suicides were distributed among 38 states.

Phase 2

Once facilities that had experienced a suicide during the 5-year study period were identified, phase 2 of the survey process was initiated. It included dissemination of a seven-page survey instrument to the directors of the facilities that sustained suicides. The survey instrument was designed to collect readily available data on three types of characteristics:

- Demographic and other victim characteristics including age, sex, race, living arrangement, current offense(s), prior offense(s), legal status (detained, committed, other), length of confinement, drug/alcohol intoxication at confinement, history of room confinement, substance abuse history, medical/mental health history, physical/sexual abuse history, and history of suicidal behavior.
- Incident characteristics including date, time, and location of suicide, and housing assignment, (e.g., single or multiple occupancy) room confinement status, method and instrument used, time span between last contact and finding victim, and possible precipitating factors of the suicide.
- Facility characteristics including facility type, facility ownership (e.g., state, county, private), capacity/population at time of suicide, and suicide prevention components in use (written policy, intake screening, staff training in suicide prevention and cardiopulmonary resuscitation, observation levels, safe housing, and mortality review).

The phase 2 survey instruments and cover letters were mailed to directors of the 83 facilities that sustained the 110 suicides. Respondents provided completed surveys on 79 suicides.

Data Limitations

Given the epidemiological data regarding youth suicide in the community, coupled with the increased risk factors associated with confinement, the reported number of suicides in this study would appear low. However, this study identified more deaths per year than a contemporary national census of juvenile facilities (OJJDP, 2002), and many experts believe that facility

This finding is consistent with suicides that occur each year in the general population (Arias et al., 2003). One previous study found that Caucasian youth held in detention attempted suicide at a rate approximately 3.5 times that of African American youth (Kempton and Forehand, 1992). Although African American and Hispanic youth comprised approximately 39 percent and 18 percent, respectively, of the confined juvenile population throughout the country (Sickmund and Wan, 2001),[1] they represented only 11 percent and 6 percent of the victims in this study. Caucasian and American Indian youth, on the other hand, comprised approximately 38 percent and 2 percent, respectively, of the confined juvenile population throughout the country, but 68 percent and 11 percent of the victims in this study. The causes of these disproportionate relationships are outside the purview of this analysis.

A substantial majority (80 percent) of the victims were male. Given the fact that more than 80 percent of all juveniles confined in the United States are male (Sickmund and Wan, 2001), these findings are not surprising.

More than 70 percent of the victims were between the ages of 15 and 17 (figure 1). The average (mean) age was 15.7, with one victim as young as 12 and another as old as 20. These findings are consistent with data from the Census of Juveniles in Residential Placement (Sickmund and Wan, 2001).

Living Arrangement Before Confinement

More than a third (38 percent) of suicide victims were living with one parent at the time of their confinement. Slightly less than one quarter (23 percent) of the victims were living with both parents. Other living arrangements included community placement (11 percent), other relative (9 percent), foster parent or guardian (8 percent), or adoptive parents (5 percent). Two victims were living on their own (3 percent), and the living arrangements of the other three victims were unknown (4 percent).

1. For comparative purposes, data collected from OJJDP's Census of Juveniles in Residential Placement was limited to the following: gender, age, race, placement authority, most serious offense charged, and adjudication status.

"self-reporting" of juvenile suicides in custody results in underestimates of the problem (Sullivan, 1995; Twedt, 2001b). Despite concerted efforts by project staff to locate all possible juvenile suicides during the 5-year study period, whether every death was identified remains uncertain.

Approximately 13 percent of the reported suicides in this study were identified through nontraditional sources (including newspaper articles and the project director's consultation with facilities sustaining the deaths). In addition, more than one-third of the reported suicides were unknown to any state agency (e.g., departments of juvenile corrections or agencies responsible for licensing and regulatory services). Most of the deaths that were unknown to state agencies occurred in either county detention centers or private residential treatment centers.[e] Many of the reported suicides in this study were also unknown to many child advocacy agencies. The fact that any suicide occurring within a juvenile facility throughout the United States could remain outside the purview of a regulatory agency should be cause for great concern within the juvenile justice community.

For More Information

For more information about the survey methodology, including copies of the phase 1 and phase 2 survey instruments, see the OJJDP report, Juvenile Suicide in Confinement: A National Survey (Hayes, 2006). The report is available on the OJJDP Web site www.ojp.usdoj.gov/ojjdp.

Notes

a. The National Center on Institutions and Alternatives was assisted on the project by two prominent national juvenile justice organizations (the National Juvenile Detention Association and the Council of Juvenile Correctional Administrators) and a consultant team composed of four prominent juvenile justice practitioners and researchers (G. David Curry, Ph.D., Robert E. DeComo, Ph.D., Barbara C. Dooley, Ph.D., and David W. Roush, Ph.D.). In addition, Cedrick Heraux, a doctoral student at Michigan State University, provided both data entry and data analysis support to the project.

b. Facilities were identified through OJJDP's Census of Juveniles in Residential Placement (OJJDP, 1999). A small percentage of facilities were either closed or could not be located, and thus presumed to be closed.

c. To encourage a high rate of response, the cover letter was co-signed by officials of both the National Juvenile Detention Association and the Council of Juvenile Correctional Administrators, and business reply envelopes were enclosed with the survey instruments.

d. By definition, detention centers hold juveniles for short periods of time in a physically restrictive environment pending juvenile court action, or following adjudication pending disposition, placement, or transfer. Reception centers are short-term facilities that hold juveniles committed by courts and conduct screening and assessment to assign them to appropriate facilities. Training schools are long-term facilities in which treatment and programming are provided in an environment with strict physical and staff controls. Ranches, camps, and farms are long-term residential facilities that do not require the strict confinement of a training school, often allowing offenders greater contact with the community. This last category includes "residential treatment centers" and "boot camps."

e. Although the study found that 27 percent of the total number of suicides (N=110) occurred in private facilities, many of which were residential treatment centers, two-thirds (67 percent) of private facilities did not respond to survey requests.

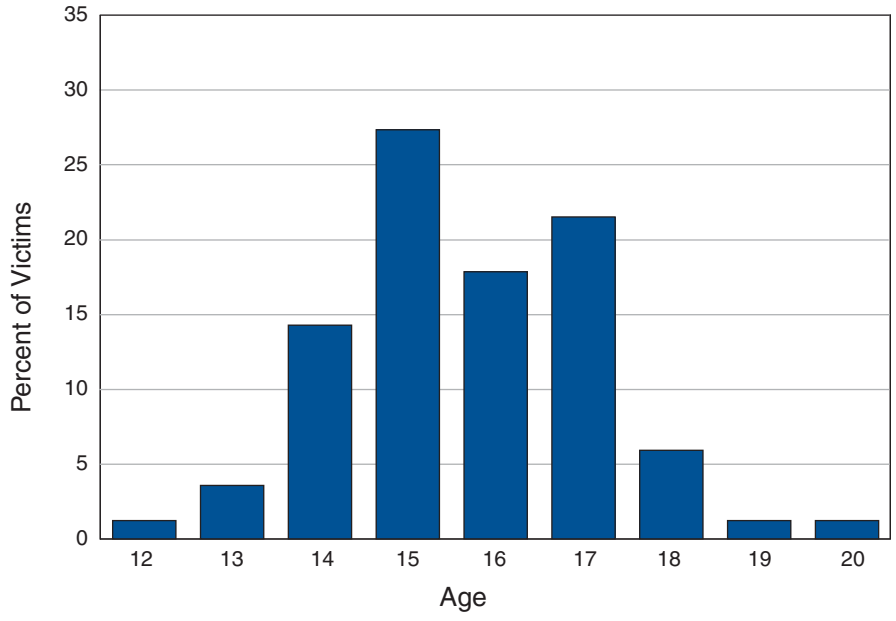
Victim's Offense and Confinement Status

Most Serious Offense[2]

A significant majority (70 percent) of victims were confined for nonviolent (i.e.,

2. For purposes of this study, offenses were broken down into six categories: property offenses included burglary, grand larceny, petty larceny, auto theft, robbery (other), receiving stolen property, shoplifting, arson, breaking and entering, entering without breaking, counterfeiting, forgery, embezzlement, vandalism, and carrying a concealed weapon; person offenses included murder, negligent manslaughter, armed robbery, rape, indecent assault, assault, battery, sexual assault, aggravated assault, and kidnapping; status offenses included running away, truancy, incorrigibility, curfew violation, and loitering; probation violation offenses included any technical violation of the terms of probation and/or parole; public order offenses included alcohol-related charges (intoxication, liquor law violation, driving under the influence), resisting arrest, disorderly conduct, prostitution, sex offenses (other), vagrancy, unauthorized use of a motor vehicle, and minor traffic offenses; and drug offenses included possession, use, and distribution of any dangerous controlled substance or narcotic.

Figure 1: Suicides in Juvenile Facilities 1995–1999, by Age of Victim



nonperson) offenses, with property offenses accounting for the highest percentage of victim confinement (figure 2). In addition, the status, probation violation, and public order categories combined represented more than a third (34 percent) of the offenses. Person offenses accounted for 30 percent of victim confinement; only 3 percent of victims were confined on drug offenses. Approximately 40 percent (13 of 33) of victims housed in a training school or other secure facility were confined for a person offense.

With only slight variance, these findings were consistent with data on the confined juvenile population throughout the country. For example, person offenses accounted for 35 percent and property offenses accounted for 29 percent of all confined juveniles throughout the country (Sickmund and Wan, 2001). However, whereas the status, probation violation, and public order categories combined represented 27 percent of all confined juveniles, these categories represented 34 percent of the victims in this study.

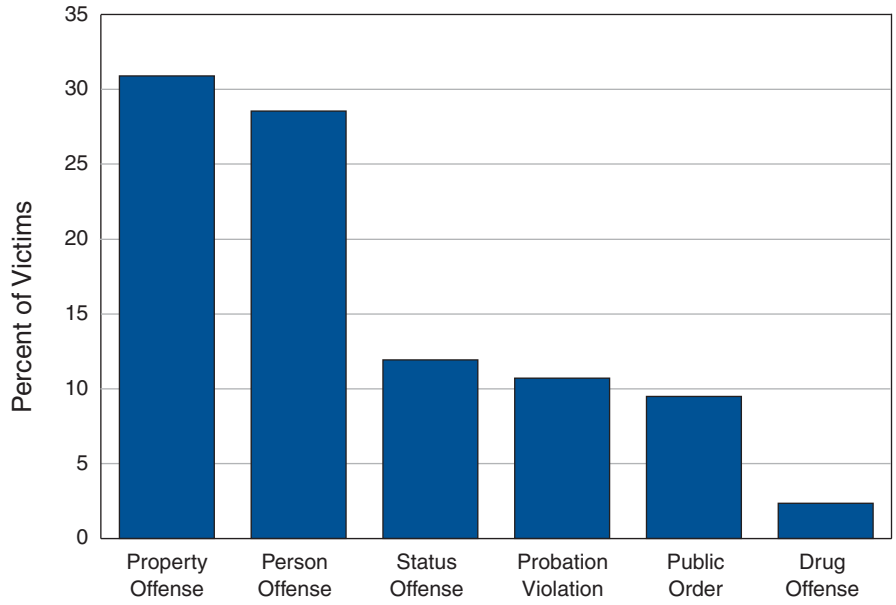
At confinement, 39 percent of victims had a second charge. Property offenses accounted for the majority (52 percent) of the additional charges, followed by person offenses (19 percent). Status, probation violation, and public order offenses combined represented 29 percent of additional charges.

A substantial majority (79 percent) of suicide victims had prior offenses. Of the victims who had a history of offenses, most committed crimes of a nonviolent nature, with property offenses the most common (50 percent). Status, probation violation, and public order offenses combined represented 23 percent of the most serious prior offenses; person offenses accounted for 23 percent of victims' prior offenses.

Confinement Status

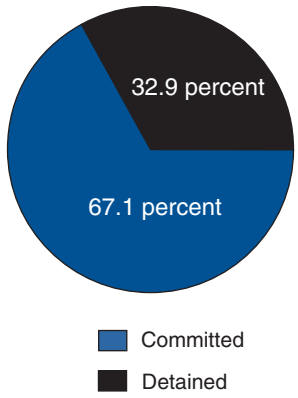
Two-thirds (67 percent) of victims were committed at the time of death (figure 3). This finding was significantly different from a national study on jail suicides that found the overwhelming majority of victims were on detention status at the time of death (Hayes, 1989). The finding was, however, somewhat consistent with national data on confined juveniles that found 74 percent of youth were committed (Sickmund and Wan, 2001). Not surprisingly, the vast majority (79 percent) of victims held in detention centers were on detention status and all training school/secure facility victims were committed at the time of death.

Figure 2: Suicides in Juvenile Facilities 1995–1999, by Victim's Most Serious Offense



Less than 4 percent of juvenile suicides occurred within the first 24 hours of confinement (and all of these deaths occurred in detention centers). This finding significantly differed from a national study on jail suicides that found more than 50 percent of suicides took place within the first 24 hours, with almost a third occurring within the first 3 hours (Hayes, 1989). The deaths reported in this national survey of juvenile suicide in confinement were distributed fairly evenly during a more than 12-month period. For example, the same number of suicides (13) occurred within the first 3 days of confinement as occurred after more than 10 months of confinement.[3] Nearly a third (32 percent) of suicides occurred within 1 to 4 months of confinement. However, all detention center suicides occurred within the first 4 months of confinement, with more than 40 percent occurring within the first 72 hours, while a significant majority (73 percent) of training school/secure facility suicides occurred 3 months or more following confinement.[4]

Figure 3: Suicides in Juvenile Facilities 1995–1999, by Victim's Confinement Status



[3] The average length of confinement prior to suicide for the 10 victims who died after more than 12 months in custody was 21.8 months.

[4] For comparative purposes, although lengths of stay within juvenile facilities throughout the country vary considerably, earlier OJJDP research has shown the average length of stay in the four facility types to be as follows: detention center (15 days), training school or other secure facility (7.5 months), reception or diagnostic center (34 days), and residential treatment center (6.5 months) (see Parent et al., 1994).

Victim's History

Slightly more than one-third of victims had a history of physical abuse (figure 4), with an immediate family member (e.g., father or stepfather) as the perpetrator in the majority of cases (20 of 27). The victim's history of physical abuse was unknown in approximately 20 percent of cases (see "Unknown Responses and Detention Centers").

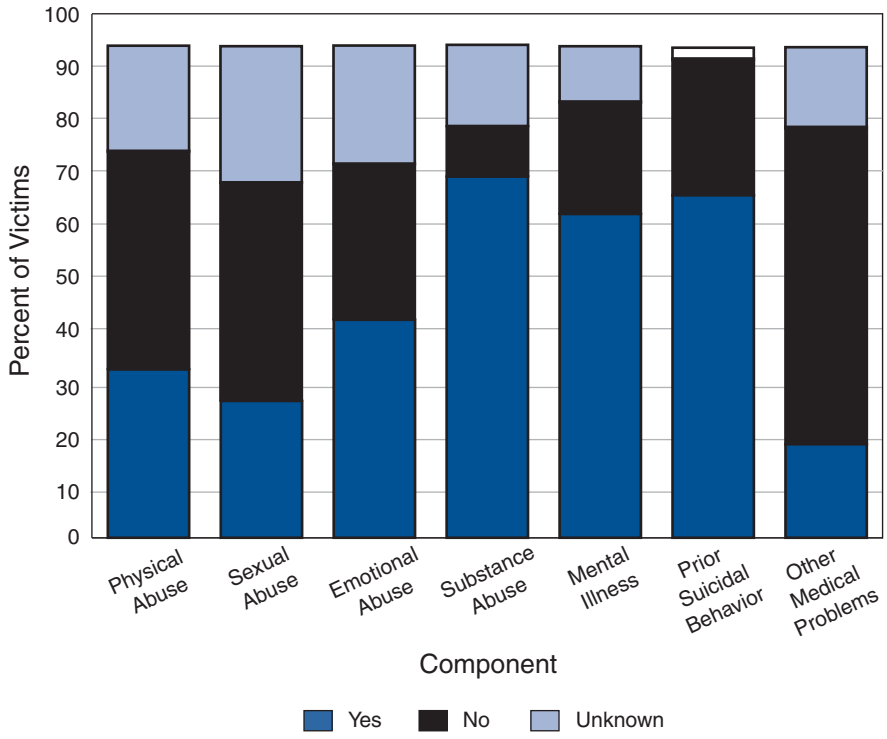
More than one-quarter (28 percent) of victims had a history of sexual abuse, with an equal number of victims whose history of sexual abuse was unknown. For those who were abused, an immediate family member (e.g., father or stepfather) was the perpetrator in many cases.

Somewhat less than half the victims (44 percent) had a history of emotional abuse. The most frequent types of abuse were excessive punishment, neglect/abandonment, verbal abuse, and other types of family dysfunction. The victim's history of emotional abuse was unknown in almost one-quarter of the cases.

A significant majority (73 percent) of victims had a history of substance abuse. Approximately one-third of victims with a substance abuse history used alcohol, marijuana, or cocaine before their confinement. This finding was consistent with other recent data suggesting that two-thirds of confined youth have one or more alcohol, drug, or mental disorders (Teplin et al., 2002).

Many suicide victims (66 percent) had a history of mental illness, and a majority (65 percent) of victims with a history of mental illness were suffering from depression at the time of death. Other mental illnesses reported included attention deficit/hyperactivity disorder, conduct disorder, post-traumatic stress disorder, and psychotic disorder (54 percent of victims were taking psychotropic medication at time of death).[5] Although other research also indicates that a high percentage of youth in the juvenile justice system suffer from at least one mental disorder and have higher rates of mental disorders than youth in the general population (Cocozza and Skowyra, 2000), it should be noted that, in the current study, substance abuse disorder (which accounts for a sizable percentage of psychiatric disorders) was considered separately from mental disorders.

Figure 4: Suicides in Juvenile Facilities 1995–1999, by Victim's History



More than two-thirds (70 percent) of victims had a history of suicidal behavior. The most frequent type of suicidal behavior was suicide attempt (46 percent), followed by suicidal ideation/threat (31 percent), and suicidal gesture/self-mutilation (24 percent). Although other research shows that between 8 percent and 52 percent of confined youth have a history of suicidal behavior (see "Self-Injurious Behavior in Juvenile Facilities," on page 7), findings from this national survey suggest that confined youth who died by suicide have a higher incidence of prior suicidal behavior than those confined youth who engage in suicidal behavior but do not die. Suicide victims in detention centers, compared with other facility types, were less likely to have a known history of suicidal behavior (52 percent versus 80 percent in all other facilities).

Few (19 percent) victims had a known history of other medical problems. Allergies and asthma were common types of medical problems found in the few victims with documented medical conditions.

Suicide Incident Characteristics

Date and Time

Contrary to common belief, certain seasons of the year and holidays did not correlate with a higher number of suicides. Although more than 30 percent of all deaths occurred during the months of January and May, suicides were distributed throughout the year. Further, no statistically significant difference existed regarding the day of the week on which suicides occurred.

Research on jail suicide has found that deaths are more prevalent when staff supervision is reduced. For example, less than 20 percent of deaths in a national study of jail suicides occurred during the 6-hour period between 9 a.m. and 3 p.m., a major portion of the day shift (Hayes, 1989). As shown in figure 5, findings from this study indicate that 71 percent of suicides occurred during traditional waking hours (6 a.m. to 9 p.m.), whereas 29 percent of suicides occurred during traditional nonwaking hours (9 p.m. to 6 a.m.). In addition, approximately half (51 percent) of suicides occurred during the 6-hour

5. For the most part, survey respondents did not report victims' mental illnesses according to the *Diagnostic and Statistical Manual (DSM) III* or *IV* editions (American Psychiatric Association, 2000).

Unknown Responses and Detention Centers

A high percentage of unknown responses to survey questions relating to several personal characteristics of the victims (including histories of substance abuse, medical problems, emotional abuse, physical abuse, sexual abuse, and mental illness) came from detention center respondents.* In addition, suicide victims housed in detention centers had a lower percentage of reported histories of suicidal behavior, suggesting that perhaps these facilities fail to inquire about such history. Finally, although the study found that many facility types lacked comprehensive suicide prevention programming at the time of the suicide, detention centers had the lowest percentage of such programming (approximately 10 percent).

According to the National Juvenile Detention Association, juvenile detention is defined as "the temporary and safe custody of juveniles who are accused of conduct subject to the jurisdiction of the court who require a restricted environment for their own and the community's protection while pending legal action" (National Juvenile Detention Association, 1990:1). Because of the lack of available community resources, and due to their unique ability to provide physical custody, detention centers often bear the responsibility for troubled youth. However, these centers are both ill-equipped and underresourced to provide anything more than basic healthcare services on a short-term basis. Although the temporary nature of the detention center experience may help to explain some of the survey findings regarding these types of facilities, such a distinction should not be viewed as a mitigating factor for suicide prevention. All juvenile facilities, regardless of size and mission, have a responsibility for the safety of all their youth, including those at risk for self-harm.

The findings from this study support the National Juvenile Detention Association's position that youth with severe mental illness should be provided services in "the appropriate therapeutic environment . . . when juvenile detention facilities are forced to house youth with severe mental health issues, [the Association] promotes the provision of adequate services by appropriately trained and licensed specialists" (National Juvenile Detention Association, 2001). More importantly, the findings suggest that the significant deficiencies in intake screening and overall suicide prevention programming within detention centers experiencing suicides warrant immediate attention. Resources need to be channeled to all juvenile facilities throughout the country, particularly detention centers, to ensure that any agency housing a juvenile provides basic, yet comprehensive, suicide prevention programming.

* Communication among agencies also appeared to be a problem in many cases. Surveys were received from several detention centers in which respondents complained that they had been temporarily "holding" the victim for another jurisdiction (e.g., state correctional facility, probation office) and knew little, if anything, about the youth. As one facility director stated, "I do not know the answers to some of these questions because the child was not from our county. He was being housed here in a state-contract bed."

period between 6 p.m. and midnight, and almost a third (29 percent) occurred between 6 p.m. and 9 p.m.

Method, Instrument, and Anchoring Device

The survey found that all but one victim used hanging as the method of suicide. (The sole victim of other means absconded from the facility and ran in front of a passing train.) The vast majority (72 percent) of these victims (n=78) used bedding (e.g., sheet, blanket) as the instrument to hang themselves. Clothing (13 percent), belts (5 percent), and shoelaces (5 percent) were used to a lesser degree. Other instruments included a towel and a bag. Suicide victims used a variety of anchoring devices, including door hinges/knobs, air vents, bedframes, window frames, closet rods, sprinkler heads, toilets, sinks, and television stands.

Intoxication

None of the 79 victims was under the influence of alcohol or drugs at the time of suicide. This finding is in stark contrast to a national study on jail suicides that found more than 60 percent of adult suicide victims were intoxicated at the time of their suicide (Hayes, 1989).

Room Assignment

Three-quarters (75 percent) of victims were assigned to single occupancy rooms at the time of suicide. The remainder (25 percent) were assigned to multiple occupancy rooms. No significant differences existed between room assignments and the types of facilities where the suicides occurred.

Room Confinement

For purposes of this study, room confinement was defined as a "behavioral sanction imposed on youth that restricted movement for varying amounts of time." It included, but was not limited to, isolation, segregation, time-out, or a quiet room. Room confinement did not include youth assigned to their room during traditional nonwaking hours (9 p.m. to 6 a.m.).

Most (62 percent) suicide victims had a history of room confinement. The circumstances that led to room confinement included threat or actual physical abuse of staff or peers (41 percent), verbal abuse of staff or peers (26 percent), failure to follow program rules or inappropriate behavior (26 percent), and other (7 percent), which included two cases of youth involved in gang activity and one case of a standard protocol for new intake.

Approximately half the suicide victims were on room confinement status at the time of death.[6] Compared to other facility types, a much smaller percentage (17 percent) of suicide victims housed in residential treatment centers were on room confinement status at the time of death.

In addition, 85 percent of victims who died by suicide while on room confinement status died during waking hours (6 a.m. to 9 p.m.), a percentage found to be

[6] The circumstances that led to room confinement included failure to follow program rules or inappropriate behavior (47 percent), threat of or actual physical abuse of staff or peers (42 percent), and other (11 percent), which included two cases of standard procedure for new intake, one case of court-ordered confinement, and one case of group confinement during a shift change.

Self-Injurious Behavior in Juvenile Facilities

Although little research has been conducted regarding youth suicide in custody, the information available suggests a high prevalence of self-injurious behavior in juvenile correctional facilities. For example, according to one national study, more than 11,000 juveniles are estimated to engage in more than 17,000 incidents of suicidal behavior in juvenile facilities each year (Parent et al., 1994). In another national survey, conducted in 1991, a modified version of the Centers for Disease Control's Youth Risk Behavior Surveillance System survey was administered to more than 1,800 confined youth in 39 juvenile institutions throughout the country (Morris et al., 1995). The study found that almost 22 percent of confined youth seriously considered suicide, 20 percent made a plan, 16 percent made at least one attempt, and 8 percent were injured in a suicide attempt during the previous 12 months.

Other studies found that large percentages of detained youth had histories of suicide attempts (Dembo et al., 1990) and current suicidal behavior (Robertson and Husain, 2001; Shelton, 2000; Davis et al., 1991; Woolf and Funk, 1985). In fact, Robertson and Husain (2001) found that 31 percent of confined youth self-reported a suicide attempt, and 9 percent were currently suicidal with either ideation and/or a plan to act on suicidal thoughts. Finally, Chowanec et al. (1991) found higher rates of self-harm behavior among incarcerated male youth than in the general adolescent community population.

Caucasian youth appear to attempt suicide in confinement at a higher rate than African American youth (Kempton and Forehand, 1992; Alessi et al., 1984). Morris and colleagues (1995) found that American Indian and Caucasian youth reported higher rates of suicidal ideation (29 percent and 25 percent, respectively) than Hispanic, Asian, and African American youth (15 percent, 12 percent, and 8 percent, respectively). Other researchers have reported similar findings of high rates of suicidal behavior among American Indian youth confined in juvenile facilities (Duclos, LeBeau, and Elias, 1994).

Several studies consistently found that certain risk factors point to high rates of suicidal behavior for incarcerated youth. For example, researchers have reported that confined youth with either a major affective disorder or borderline personality disorder have a higher degree of suicidal ideation and more suicide attempts than adolescents in the general population (Alessi et al., 1984); incarcerated male youth whose parents had affectionless bonding styles also reported more suicidal ideation and/or attempts (McGarvey et al., 1999). Other researchers concluded that a history of sexual abuse "directly affects the development of suicidal ideation and behavior in incarcerated adolescents" (Esposito and Clum, 2002:145).

Findings from a 2002 study indicate that more than half (52 percent) of all detained youth self-reported current suicidal ideation, with 33 percent having a history of suicidal behavior (Esposito and Clum, 2002). In addition, a study of youth confined in a juvenile detention facility found that suicidal behavior in males was most significantly associated with depression, major life events (such as court involvement, death of a family member, etc.), poor social connections, and past suicide attempts, whereas suicidal behavior in females was associated with impulsivity, current depression, instability, and younger age (Mace, Rohde, and Gnau, 1997; Rohde, Seeley, and Mace, 1997). The most common correlate among both males and females was not living with a biological parent before detention. Suicidal behavior of a friend was significantly associated with past and current suicidal ideation among boys, but not girls (Rohde, Seeley, and Mace, 1997).

Finally, a recent study of confined youth referred for psychiatric assessment found that 30 percent reported suicidal ideation/behavior and 30 percent reported self-mutilative behavior while incarcerated (Penn et al., 2003). These youth reported more depression, anxiety, and anger than nonsuicidal confined youth.

higher than that of victims not on room confinement who died by suicide during the same hours (71 percent).

Facility Characteristics and Response

Facility Type and Population

As previously indicated, this national survey of juvenile suicides in confinement found that 42 percent of juvenile suicides took place in training schools and other secure facilities, 37 percent in detention centers, 15 percent in residential treatment centers, and 6.3 percent in reception or diagnostic centers. Almost half (48 percent) of the suicides occurred in facilities administered by state agencies, 39 percent in county facilities, and 13 percent in private programs. These percentages, however, may underestimate the actual prevalence of suicide in the types of facilities that had the highest rates of nonresponses to the survey (e.g., private programs). The 79 suicides were distributed among 70 juvenile facilities: 65 facilities sustained a single suicide, 3 facilities had 2 suicides each, 1 facility had 3 suicides, and 1 facility had 5 suicides during the survey period.

Two-thirds (67 percent) of suicides occurred in facilities with populations of 200 or fewer youth, and 42 percent in facilities with 50 or fewer youth[7] (figure 6). The study did not find any evidence to suggest that overcrowding was a contributing factor to juvenile suicide. In fact, the majority (68 percent) of suicides took place in facilities that were either at or below bed capacity; an additional 10 percent of suicides occurred in facilities that were slightly (less than 10 percent) over capacity.

Assessment by Qualified Mental Health Professional

National juvenile correctional standards and standard correctional practice indicate that confined youth should be assessed as soon as possible by a qualified mental health professional (National Commission on Correctional Health Care, 1995, 1999, 2004; Roush, 1996; Underwood and Berenson, 2001), with Performance-based Standards requiring an assessment within 7 days of entry into the facility

[7] The direction of this finding is somewhat consistent with earlier OJJDP research finding that approximately 72 percent of juveniles are housed in facilities with 250 or fewer beds, although only 21 percent are housed in facilities with 50 or fewer beds (see Parent et al., 1994).

(Council of Juvenile Correctional Administrators, 2003).[8] For the purposes of this study, and consistent with national standards, a qualified mental health professional was defined as an individual who by virtue of his or her education, credentials, and experience is permitted by law to evaluate and care for the mental health needs of patients. This definition includes, but is not limited to, psychiatrists, psychologists, clinical social workers, and psychiatric nurses. This examination by a qualified mental health professional is separate from an initial intake screening.

A large majority (70 percent) of suicide victims were assessed by a qualified mental health professional. Compared to other facility types, a significantly smaller percentage (35 percent) of suicide victims housed in detention centers received mental health assessments. However, slightly more than half (52 percent) of the detention center victims died within the first 6 days of confinement, thus reducing the opportunity for assessment.

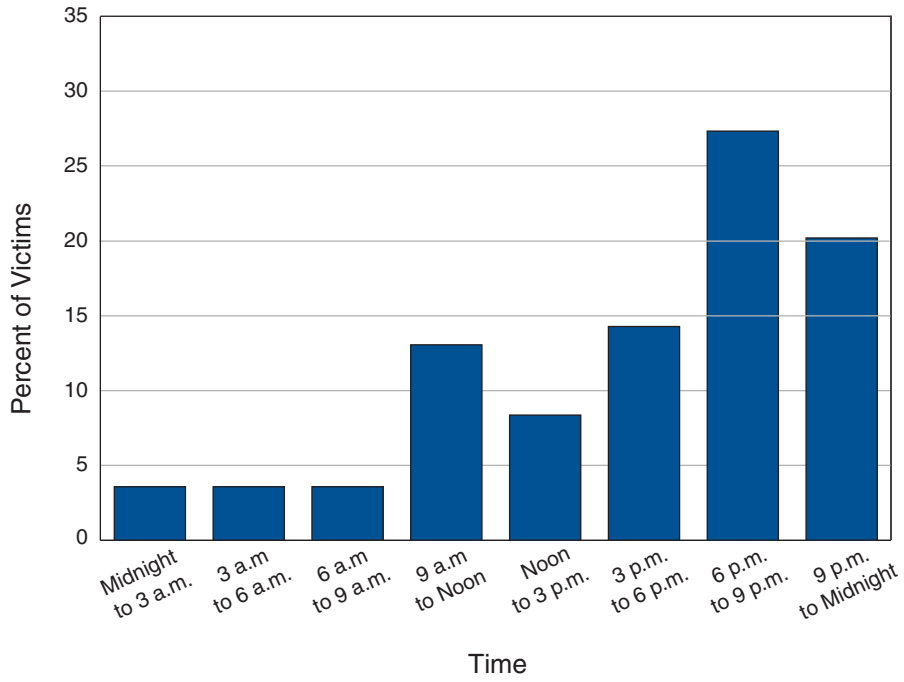
Of those victims receiving a mental health assessment, almost half (49 percent) had a contact visit with a qualified mental health professional within 6 days of their death. However, 20 percent of assessed victims had not been assessed within 30 days of their death and slightly less than half (44 percent) of all victims either had never been assessed by a qualified mental health professional or had not been assessed within 30 days of their death.

Suicide Precaution Status

A small percentage (17 percent) of youth were on suicide precaution status at the time of death. Of these 13 victims, 10 were required to be observed at 15-minute intervals; the 3 remaining youth were to be observed at continuous, 5-minute, and 60-minute intervals, respectively. Despite their identified risk of suicide, almost half (6 of 13) of these victims were found to be last observed in excess of 15 minutes before their suicide.

8. In 1995, OJJDP contracted with the Council of Juvenile Correctional Administrators to develop, field test, and implement performance-based standards for juvenile correctional and detention facilities. The Performance-based Standards Project offers a systematic method for facilities to measure outcomes and provides guidance for facilities to review their practices and to take corrective action.

Figure 5: Suicides in Juvenile Facilities 1995–1999, by Time of Suicide



Time Span

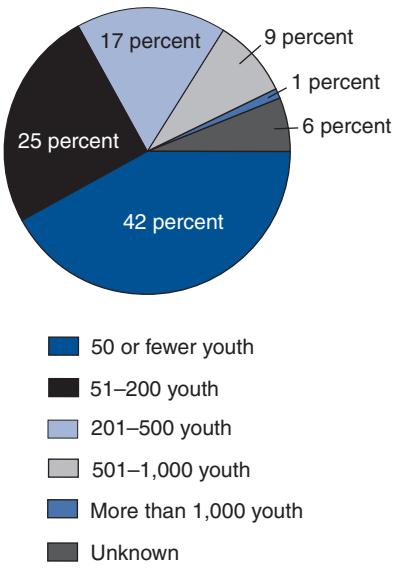
Approximately 41 percent of respondents stated that staff found the victim in less than 15 minutes following the last observation of the youth. However, slightly more than 15 percent of victims were reported to be found more than an hour following the last observation, including several victims found after 3 hours. In one case, the time span between the last observation and the suicide was not known.

Suicide Prevention Programming

For this national survey of juvenile suicide in confinement, data were collected to determine whether facilities sustaining a suicide had comprehensive suicide prevention programming in place at the time of the death. Consistent with national juvenile correctional standards, comprehensive suicide prevention programming included the following seven critical components: written policy, intake screening, training, CPR certification, observation, safe housing, and mortality review (Hayes, 1999).

As indicated in figure 7, a substantial majority (90 percent) of suicides occurred in facilities that implemented one or more suicide prevention components. However,

Figure 6: Suicides in Juvenile Facilities 1995–1999, by Facility Population



as shown in figure 8, only 20 percent of suicides occurred in facilities that implemented all seven suicide prevention components. The degree to which suicides occurred in a facility that had all seven suicide prevention components varied considerably by facility type: detention centers (10 percent), training schools and other secure facilities (24 percent), reception or diagnostic centers (40 percent), and residential treatment centers (25 percent).

Written Suicide Prevention Policy

Standard correctional practice and national juvenile correctional standards indicate that juvenile facilities should have a written suicide prevention policy that details the identification and management of suicidal youth (American Correctional Association, 1991; Council of Juvenile Correctional Administrators, 2003; Hayes, 1999; National Commission on Correctional Health Care, 1995, 1999, 2004; Roush, 1996). A significant majority (79 percent) of suicides occurred in facilities that maintained a written suicide prevention policy at the time of the suicide, although this was less true for suicides that took place in detention centers (62 percent).

Intake Screening for Suicide Risk

Most (71 percent) suicides took place in facilities that maintained an intake screening process to identify the suicide risk of youth entering the facility, although this was less true (48 percent) of suicides in detention centers. This finding is consistent with OJJDP research suggesting that approximately 70 percent of confined youth are screened for suicide risk (OJJDP, 2002).

Suicide Prevention Training

More than 4 in 10 juvenile suicides (43 percent) occurred in facilities that did not provide any type of suicide prevention training (pre-service, annual, and/or periodic) to their direct care staff.

Of the 45 suicides that occurred in facilities that provided suicide prevention training, two-thirds (67 percent) were in facilities that provided annual instruction, with training schools and other secure facilities providing the lowest percentage (42 percent) of annual training. Only 38 percent of juvenile suicides (30 of 79) took place in facilities that provided annual

Figure 7: Suicides in Juvenile Facilities 1995–1999, by Facility's Implementation of Suicide Prevention Components

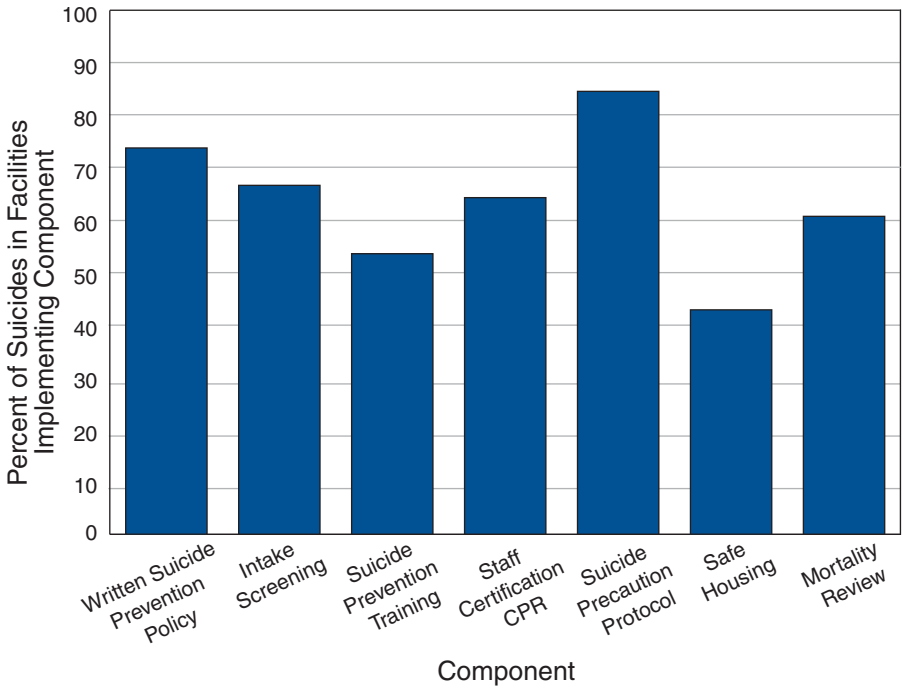
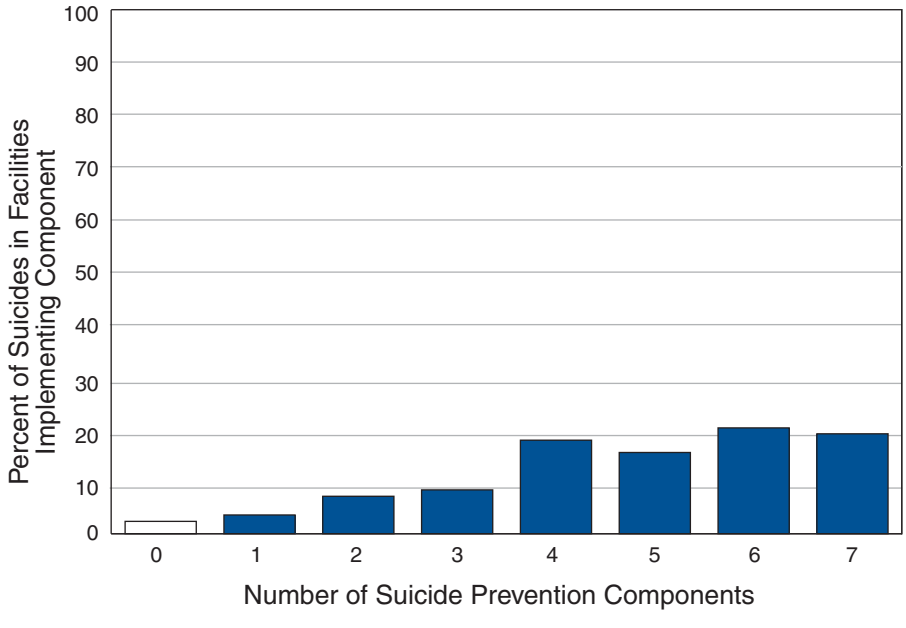


Figure 8: Suicides in Juvenile Facilities 1995–1999, by Number of Suicide Prevention Components Implemented by Facility



Comprehensive Suicide Prevention Programming

The findings from this survey suggest that, although the rate of compliance with individual suicide prevention components was high, few juvenile facilities that sustained a suicide had all the components of a comprehensive suicide prevention program. Consistent with national correctional standards and practices, all juvenile facilities, regardless of size and type, should have a detailed written suicide prevention policy that addresses each of the following critical components (Council of Juvenile Correctional Administrators, 2003; Hayes, 1999, 2000; National Commission on Correctional Health Care, 1999, 2004; Roush, 1996).

Training. All facility, medical, and mental health staff should receive 8 hours of initial suicide prevention training, followed by a minimum of 2 hours of annual refresher training. Training should provide information about predisposing factors, high-risk periods, warning signs and symptoms, identifying suicidal behavior despite the denial of risk, and components of the facility's suicide prevention policy.

Identification/screening. Intake screening for suicide risk should take place immediately upon confinement and prior to housing assignment, and include inquiry regarding current and past suicidal behavior, current suicidal ideation, earlier mental health treatment, recent significant loss, suicidal behavior by a family member or close friend, suicide risk during prior contact with or confinement in agency, and arresting or transporting officers' opinion regarding whether youth is currently at risk. The policy should include procedures for referral to mental health personnel for further assessment. (Several intake screening and assessment forms are available for the identification of suicide risk, including the "Intake Screening Form/Suicide Risk Assessment" [Hayes, 1999], the "Juvenile Suicide Assessment" [Galloucis and Francek, 2002], and the Massachusetts Youth Screening Instrument-MAYSI-2 [Grisso and Barnum, 2000].)

Communication. At a minimum, facility procedures should enhance communication (1) between the arresting/transporting officer(s), family members, and facility staff; (2) between and among facility staff (including medical and mental health personnel); and (3) between facility staff and the suicidal youth.

Housing. Isolation should be avoided. Whenever possible, suicidal youth should be housed in the general population, mental health unit, or infirmary, in close proximity to staff. Youth should be housed in suicide-resistant, protrusion-free rooms. Removal of clothing (excluding belts and shoelaces) and use of restraints should be avoided whenever possible, and should only be used as a last resort for short periods of time when the youth is engaging in self-destructive behavior.

Levels of supervision. Two levels are normally recommended for suicidal youth:

- Close observation—reserved for youth who are not actively suicidal, but express suicidal ideation and/or have recent histories of self-destructive behavior and are now viewed as potentially suicidal—requires supervision at staggered intervals not to exceed every 15 minutes. In addition, a youth who denies suicidal ideation or does not threaten suicide, but demonstrates other characteristics of concern (through actions, current circumstances, or recent history) indicating the potential for self-injury, should be placed on close observation.
- Constant observation—reserved for youth who are actively suicidal (threatening/engaging in the act)—requires supervision on a continuous, uninterrupted basis.

In addition, an intermediate level of supervision can be used with observation at staggered intervals not to exceed every 5 minutes. Other supervision aides (e.g., closed-circuit television, companions, or watchers) can be used as a supplement to, but not as a substitute for, these observation levels.

Intervention. A facility's policy regarding intervention should be threefold:

- All staff should be trained in standard first aid and cardiopulmonary resuscitation (CPR).
- Any staff member who discovers a youth attempting suicide should immediately respond, survey the scene to ensure the emergency is genuine, alert other staff to call for medical personnel, and begin life-saving measures.
- Staff should never presume that the youth is dead, but rather initiate and continue appropriate life-saving measures until relieved by medical personnel.

All housing units should contain a first aid kit, pocket mask or mouth shield, Ambu bag, and rescue tool (to quickly cut through fibrous material).

Reporting. In the event of an attempted or completed suicide, all appropriate facility officials should be notified through the chain of command. All staff who came in contact with the victim before the incident (or while responding to the incident) should submit a statement as to their full knowledge of the youth and the incident.

Followup/mortality review. All staff (and youth) involved in the incident should be offered critical incident stress debriefing. If resources permit, a psychological autopsy is recommended. Every completed suicide and serious suicide attempt (i.e., requiring hospitalization) should be examined by a mortality review process. Ideally, the review should be coordinated by an outside agency or facility to ensure impartiality. The mortality review—separate and apart from other formal investigations that may be required to determine the cause of death—should be multidisciplinary (i.e., involve correctional, mental health, and medical personnel) and include a critical inquiry of the following:

- The circumstances surrounding the incident.
- Facility procedures relevant to the incident.
- All relevant training received by involved staff.
- Pertinent medical and mental health services/reports involving the victim.
- Possible precipitating factors leading to the suicide.
- Recommendations, if any, for changes in policy, training, physical plant, medical or mental health services, and operational procedures.

suicide prevention training to direct care staff.

Approximately half (51 percent) of suicides in facilities that provided suicide prevention training were in facilities that provided the training in a 1- or 2-hour block. Only three suicides took place in a facility that provided a full day (7–8 hours) of instruction.

Certification in Cardiopulmonary Resuscitation

More than two-thirds (68 percent) of suicides occurred in facilities where all direct care staff had received certification in cardiopulmonary resuscitation (CPR), although this was true to a lesser degree (55 percent) in training schools and other secure facilities.

Suicide Precaution Protocol

The overwhelming majority (90 percent) of victims were located in facilities that maintained a suicide precaution protocol for the observation (excluding closed-circuit television monitoring) of youth. Of these 71 victims, fewer than half (48 percent) were in facilities where constant observation was the highest level of suicide precaution, including only 28 percent of suicides in detention centers. More than one-third (37 percent) were in facilities that reported observation at 15-minute intervals as the highest suicide precaution level.

Safe Housing

Less than half (46 percent) the suicides occurred in a facility that had a housing process by which a suicidal youth could be assigned to a safe and protrusion-free room. Although the majority (61 percent) of suicides in training schools and other secure facilities and reception/diagnostic centers took place in a facility that provided safe and protrusion-free housing for suicidal youth, this was true for only 35 percent of suicides in detention facilities and 25 percent of suicides in residential treatment centers.

Mortality Review

National juvenile correctional standards recommend that a mortality review be conducted following each suicide (Hayes, 1999; National Commission on Correctional Health Care, 1995, 1999, 2004; Roush, 1996). For the purposes of this study, mortality review is defined as "a multidisciplinary committee process that examines the events surrounding the death to determine if the incident was preventable. The review process might include recommendations aimed at reducing the opportunity of future deaths." The process also attempts to identify any possible precipitating factors that may have caused the suicide (see "Precipitating Factors to the Suicide" above). Nearly two-thirds (65 percent) of respondents reported that a mortality review was conducted following the suicide, although deaths in detention centers were reviewed to a lesser degree (52 percent).

Recommendations

The findings from this survey reveal several key issues that merit consideration. Recommendations arising from the study are presented below:

- Consistent with national corrections standards and practices, juvenile facilities, regardless of size and type, should have a detailed written suicide prevention policy that addresses each of the following critical components: training, identification/screening, communication, housing, levels of supervision, intervention, reporting, and followup/mortality review (see "Comprehensive Suicide Prevention Programming" on page 10).
- Juvenile facility administrators should create and maintain effective training programs and ensure that direct care, medical, and mental health personnel receive both pre-service and annual instruction in suicide prevention.
- Suicide prevention training curriculums used in juvenile facilities have historically relied on information gathered about adult inmate suicide and youth suicide in the general population. Given the findings from this study, which demonstrate significant differences between adult inmate suicide and juvenile suicide, development of separate training curriculums targeted to suicide prevention within juvenile facilities is warranted.
- Significant deficiencies in intake screening and inadequate suicide prevention programming within detention centers experiencing suicides warrant immediate attention. Resources need to be channeled to juvenile facilities throughout the country, particularly detention centers, to ensure that any agency housing a juvenile provides basic, yet comprehensive, suicide prevention programming, including intake screening for suicide risk.
- More than one-third of suicides identified in this study were unknown to government agencies responsible for the care and advocacy of confined youth. The fact that any suicide occurring within a juvenile facility could remain outside the purview of regulatory agencies is disturbing. At a minimum, each death within a juvenile facility should be accounted for, comprehensively reviewed, and provisions made for appropriate corrective action.

Precipitating Factors for the Suicide

Of the suicides that occurred in facilities that conducted mortality reviews (*n*=51), precipitating factors were identified for more than half (59 percent). These factors included:

- Fear of waiver to adult system, transfer to a more secure juvenile facility, or pending undesirable placement (including home) (10 cases).
- Recent death of a family member (6 cases).
- Failure in the program (5 cases).
- Contagion (from another recent suicide in facility) (3 cases).
- Parent(s) threat of/failure to visit (2 cases).
- Other (i.e., loss of relationship, close proximity to birthday, suicide pact with peer, ridicule from peers) (4 cases).

In several cases, more than one precipitating factor was identified—only the perceived primary factor is listed above. However, of the 79 suicides reported in this study, possible precipitating factors for the deaths were offered by respondents in only 30 (or 38 percent) of the cases.

Conclusion

This study was the first attempt to collect data on the extent, characteristics, and distribution of suicides within juvenile facilities throughout the country. More research is clearly needed. For example,

possible precipitating factors were identified for only slightly more than one-third of the suicides reported in this study. This indicates uncertainty of the concept of precipitants, inadequate review of the circumstances surrounding the death, limited knowledge of the victim's background, or all the preceding. Further inquiry regarding possible precipitating factors is essential to enhancing understanding of this problem.

Although approximately half the victims in this study were under room confinement at the time of death, further research is needed to explore the relationship between isolation and suicide. Despite the fact that youth were alone in their rooms between the hours of midnight and 6 a.m., with ample opportunity and privacy to engage in self-injurious behavior, few suicides took place during this 6-hour period. Instead, approximately half the deaths occurred during the 6-hour period between 6 p.m. and midnight—with almost a third occurring between 6 p.m. and 9 p.m. Perhaps most importantly, the majority of victims who died by suicide while on room confinement status died during waking hours. These are periods when youth are normally either involved in programming or back on their housing units, interacting with staff and peers—perhaps more likely to become involved in confrontations and/or behavior that results in room confinement. Further research is needed to explore this issue.

Although only a small percentage of victims died by suicide following more than 12 months of custody, the average length of confinement before suicide for these youth was quite high (approximately 22 months), suggesting that prolonged confinement might have been one of the precipitating factors in the suicides. This issue merits further study.

Findings from this study pose formidable challenges for juvenile correctional and healthcare officials and direct care staff. For example, although room confinement remains a standard procedure in most juvenile facilities, its use should be judicious and closely scrutinized. Since suicides can occur at any time during a youth's stay in a facility, with the same number of deaths occurring within the first few days of custody as after almost a year of confinement, intake screening for the identification of suicide risk should be viewed as time-limited. Because youth can be at risk at any point during confinement, the challenge for those who work in the area of juvenile detention and corrections is to establish a continuum of comprehensive suicide prevention services aimed at the collaborative identification, continued assessment, and safe management of youth at risk for self-harm.

For Further Information

This Bulletin presents information taken from the OJJDP Report, *Juvenile Suicide in Confinement: A National Survey* (NCJ 213691). The full report is available on OJJDP's Web site (www.ojp.usdoj.gov/ojjdp).

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