Suicide in State Corrections

SUICIDE IN STATE CORRECTIONS


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Abstract

The authors reviewed all suicides between 1992 and 2002 in a statewide correctional system. Thirty-seven inmates committed suicide in various prisons during this period. The average suicide rate for the system over the period of study is higher than the suicide rate of the general population, but it is lower than the correctional suicide rates reported in the literature. Inmates who committed suicide were more likely to be young single white males with mental health and substance abuse problems. First-time inmates and those incarcerated for a short period of time presented a higher risk than long term prisoners. Furthermore, transferring an inmate between facilities was signaled as a risk factor. This paper highlights the importance of: 1] systematic screening of offenders and evaluation of suicide risk, 2] obtaining mental health data from community sources and jails, 3] recognizing isolation in administrative segregation, and inter-facility transfer as risk factors, 4] clinical monitoring and 5] tracking of inmate communication of intent to commit suicide. Based on this study the authors discuss certain critical steps as part of a comprehensive suicide prevention program in state prisons.
Introduction

Suicide is the third leading cause of death in prisons in the United States, following natural deaths and AIDS (Metzner, 2002). Studies of suicide in prison seem to focus on two general areas: a] risk factors that lead to suicide and b] the phenomenology of the suicide act itself although many studies incorporate both aspects.

In prison, inmates who commit suicide are generally young single white males (Liebling, 1993; Green, Kendall, Andre, Looman & Polvi, 1993), are likely to have received long sentences and have high prevalence of mental disorders (Hurley, 1989; Joukamaa, 1997; McHugh, 1995; White, Schimmel & Frickey, 2002). Marcus & Alcabes (1993) reported that in the New York City Department of Corrections 52% of inmates who died by suicide had an Axis I diagnosis. He, Felthous, Holzer, Nathan & Veasey (2001) reported that 88% of their sample received a psychiatric diagnosis.

Another commonly reported risk factor is a history of alcohol and substance abuse (Dole, 1972; Kerkhof & Bernasco, 1990; Liebling, 1993). The majority of substance abusers who commit suicide in prison preferred alcohol as their drug of abuse. While He et al. (2001) found that 68% of inmates who committed suicide abused alcohol, Weitzel & Blount (1982) found that there was no increased risk for any specific group of substance abusers. In their study, nonusers were not more or (surprisingly) less at-risk than heavy substance abusers.

Suicidal inmates are more likely to have committed a violent crime such as murder, rape, felonious assault, or assault and battery (Ivanoff & Jang, 1991; Lester & Danto, 1993). Conversely, Hayes et al. (as cited in Bonner, 2000) found that an inmate who commits suicide is likely a nonviolent offender.
The rate of suicide in prisons has been disputed, primarily because different studies have focused on different prison populations. The suicide rate in federal prisons has been reported to be between 14 and 19 per 100,000 inmates per year (White et al., 2002; Lester & Danto, 1993). The rates for state prisons are higher, ranging between 18 and 40 (Salive, Smith, & Brewer, 1989). Both federal and state prison rates exceed the recognized suicide rate of 12 per 100,000 in the general population, while the jail rate is approximately nine times that of the general population.

Fruehwald, Eher & Frottier (2001) examined the link between previous suicidal behavior and completed suicides and found that 50% of the inmates who committed suicide had made prior attempts. Research suggests that inmates who have a history of suicidal behavior are more likely to commit suicide than their peers who have no history of suicidal behavior.

An inmate’s housing assignment may be linked to suicidal behavior, especially if the inmate is isolated from others. Living in a single cell and administrative segregation increases suicide risk due to great deal of isolation and deprivation. In *Falkenstein vs. City of Bismarck* (1978) the court ruled that the conditions of “the hole” (administrative segregation) did in fact contribute to an inmate’s suicide while in *Maricopa County v. Cowalt*, a later case, the court found that the brick and mortar structure of a correctional facility did not contribute to an inmate’s suicide (O’Leary, 1989).

The most common method of suicide in prison is hanging followed by overdose with psychiatric medications, especially tricyclic antidepressants. Hanging is likely preferred because it can be carried out using a variety of materials such as bed sheets, socks, jump ropes, belts, elastic band from a pair of underwear, shoelaces, and bandages (He et al., 2001; Marcus & Alcabes, 1993). In order for a hanging to result in death, the person must succeed in cutting off
blood flow to the brain by applying about 2 kg of pressure and the inmate does not have to be fully suspended in the air. Death by hanging usually takes about 5-7 minutes but permanent brain damage can occur in as little as three minutes (Lester & Danto, 1993). Although hanging is the most common method of suicide, it only accounts for 7% of all attempted suicides.

In prison, acute and chronic psychosocial stressors may precipitate suicide. The stressor may be due to the stigma, shame or guilt associated with the crime that led to incarceration. Institutional stress due to undesirable unit or housing assignment, and disciplinary action may precipitate suicidal behaviors. Death of a loved one is an acute stressor that can precipitate or aggravate preexisting suicidal feelings (Rieger, 1971; He et al., 2001). Usually, an inmate cannot participate in the common mourning rituals such as the wake, funeral, and burial service. Grieving inmates are not at liberty to express their sorrow overtly which may lead the inmate to suppress his or her feelings of sadness (Schetky, 1998).

**Purpose and Method of Study**

The purpose of this study is to identify the demographic, clinical and institutional profile of inmates who committed suicide while incarcerated between 1992 and 2002, and specifically, to delineate the factors which contributed to their suicides. Based on the findings, the authors propose certain recommendations which can be implemented in state prisons as a part of the overall suicide prevention strategy. The last year of our study period corresponded with the implementation of a comprehensive mental health services delivery system in the state, which included a nearly full complement of psychiatrists and mental health professionals.

Thirty-seven inmates committed suicide between 1992 and 2002. The method of study consisted of retrospective collection of the following data: demographics, criminal history and incarceration, type of correctional facility, suicide event, prior suicide attempts, communication
of intent, suicide watch, mental disorders, psychosocial stressors, substance and alcohol abuse history, debilitating medical conditions, and psychological autopsy and mortality review findings. Institutional and classification files, medical and mental health records, and mortality review reports were reviewed thoroughly to obtain data for each of the 37 cases. One inmate’s classification file was unavailable for review. The authors recognize that some may have died “accidentally” during suicide attempts; all thirty-seven were included in the analysis since all of them were certified as suicide. It was practically difficult to review the files of thousands of inmates in the system from 1992 to 2002 for comparative purposes or for complex statistical analysis.

Results

Suicide Rate

The annual suicide rate for the correctional system was calculated for each year from 1992 through 2002. The highest rate was 29.63 in 1996 followed by 28.39 in 1998. The lowest rate, 3.37, occurred in 2002 (see Table 1). The average suicide rate for the system during this study was 15.2 per 100,000 inmates per year.

Demographics

Gender and Age: Thirty-five inmates (94.6%) were male and 2 (5.4%) were female. At the time of suicide, their ages ranged from 18 to 53 years old, though 32 (86.5%) were forty or younger.

Ethnicity and Language: Thirty-four inmates (91.9%) were US born and English-speaking. Three (8.1%) were foreign-born native Spanish speakers. Twenty-seven inmates (73.0%) were Caucasian, 7 (18.9%) were African-American and 3 (8.1%) were Hispanic.
Marital Status: Inmates were involved in many different types of relationships. Seventeen inmates were never married (45.9%), 9 were experiencing a broken relationship (24.3%), and 10 were in an intact relationship (27.0%). Of the broken relationships, 1 inmate (2.7%) was a widower, 6 (16.2%) were divorced, 1 (2.7%) was separated, and 1 (2.7%) was in the process of divorce. Of the 10 intact relationships, 5 (13.5%) were married, 3 (8.1%) were dating, and 2 (5.4%) were engaged. The marital status of one inmate (2.7%) could not be determined.

Education: Only 9 inmates (24.3%) received high school diplomas. The other 28 (75.7%) did not complete high school, but 7 (18.9%) did go on to receive a G.E.D. One inmate (2.7%) received his G.E.D. prior to incarceration and the other 6 (16.2%) earned their diploma while incarcerated.

Criminal History: Twenty-three inmates (62.2%) had prior criminal record. Nineteen (51.4%) of those committed nonviolent crimes and 16 (43.2%) of them had violent prior offenses. These categorizations are not mutually exclusive, as some inmates had committed both nonviolent and violent prior offenses. The index offense, or the most serious crime for which the inmate was serving time, varied among the offenders. Nineteen inmates (51.4%) committed an offense against a person/s. Twelve (32.4%) had property crimes and 6 (16.2%) were drug offenders. This was the first period of incarceration for 29 (78.4%) of the inmates.

Clinical Variables

Mental Health: Twenty-seven inmates (73.0%) had been diagnosed with an Axis I diagnosis at some point prior to suicide. The time of diagnosis varied but 16 (43.2%) were diagnosed while incarcerated. However, pre- incarceration mental health history was not available for most of the inmates. It was very common for these inmates to be diagnosed with several comorbid disorders. Their Axis I diagnoses fell into seven main categories which are not
mutually exclusive (see Table 2). Substance related disorders [43.2%] mood disorders [32.4%] and psychotic disorders [27%] were the most common. With regard to Axis II disorders, 22 inmates (59.4%) received a diagnosis of a personality disorder. The distribution of various personality disorders is noted (see Table 3).

All inmates received a mental health classification score indicating the degree of mental impairment. Mental Health Score (MH score) is a key component in the offender classification system. A score of 5 indicates severe psychopathology requiring psychiatric hospitalization, 4 means serious impairment requiring long term treatment in specialized units, 3 designates moderate impairment requiring psychotropic medication management, and 2 indicates mild impairment. A MH score of 1 is given when the inmate shows no signs of psychopathology. While this population did have a high incidence of mental illness, the MH scores were most commonly in the mid-range. In fact, 27 inmates (73%) were given a score of 3 or below. Inmates with moderate or low mental health scores (MH3 or below) compared to those with scores of MH4 or MH5 seemed to be at an increased risk of committing suicide. Finally, twelve (32.4%) were referred for inpatient care during their incarcerations. Two (5.4%) were in the process of referral at the time the suicide. The 12 inmates (32.4%) who were sent to inpatient mental health settings were referred a total of 22 times to 3 different locations within the state.

Substance Abuse: One striking finding is that 34 inmates (91.9%) had a history of drug or alcohol abuse. The most frequently abused drugs were alcohol [75.7%] and marijuana [54.1%]). Many inmates abused more than one drug. The average age at which abuse began was calculated for the 29 inmates for whom this data was available, which indicated an age of onset of abuse at 15 years.
Symptoms and Psychosocial Stressors: Serious psychiatric symptoms preceded the suicide. Inmates were most likely to be depressed [43.2%], followed by hallucinations [40.5%], delusions [32.4%] and anxiety [32.4%]. These categories are not mutually exclusive. The following symptoms did not occur often enough prior to suicide to be considered significant: hyperactivity, loss of appetite, and loss of weight. In addition to these symptoms, inmates experienced various psychosocial stressors that could have contributed to the suicide. New charges or convictions were the most frequently reported stressor, with 22 inmates (59.5%) having experienced such an event before the suicide. In most cases, the charges were the result of conduct violations within the prison. Other stressors included guilt and shame as a result of the crime committed [43.2%] and family conflict [35.1%].

Prior Suicide Attempt: Prior suicide attempts are significantly correlated with suicide in mentally ill offenders. Thirty-two inmates (86.5%) were “screened” for suicide risk upon arrival at the current correctional facility, where the suicide occurred. One inmate (2.7%) was screened at a prior facility but it is unknown whether or not he was screened at the current facility as well. Three inmates (8.1%) were not screened by the current correctional facility or by any other facility. No information was available concerning screening for one inmate (2.7%). Inmates were screened for suicide risk; however, the method used was not comprehensive enough to be relied upon as the only safeguard against suicide.

Twenty-four inmates (64.9%) had a history of prior suicide attempts. Eighteen (48.6%) had made at least one suicide attempt prior to incarceration. Three (8.1%) had attempted suicide during incarceration. Seventeen (45.9%) attempted suicide at least once during the current period of incarceration. Two (5.4%) made suicide attempts at undocumented times. None of the above categories are mutually exclusive, as some inmates made multiple attempts.
Prior mental health records were requested for 11 (29.7%) of the inmates, and files were only received for 5 (13.5%) inmates. Therefore, no outside information was sought for 26 inmates (70.3%) and no information was obtained for 32 inmates (86.5%).

*Chronic Illnesses:* Data was collected to determine if any inmate suffered from chronic debilitating illnesses which may have contributed to the suicidal act. Chronic disease was not found to be significantly related to suicide in prison.

**Institutional Factors**

*Housing Assignment and Inter-Facility Transfers:* Inmates were most likely to be housed in a single cell [59.5%] in administrative segregation [48.6%] at the time of suicide. The correctional facilities where the inmate committed suicide were maximum-security institutions [67.6%]. Transferring an inmate from one correctional facility to another seemed to be a risk factor for suicide. Eighteen (48.6%) had been transferred to the facility where he or she committed suicide within four months of the suicide event.

*Communication of Intent:* Twenty-two inmates (59.5%) communicated their intent to commit suicide either verbally or non-verbally (see Figure 2). The remaining 15 (40.5%) did not communicate intent in any way. Twenty-one (56.7%) verbally communicated their intent, while four (10.8%) communicated non-verbally. These categories are not mutually exclusive because several inmates communicated both verbally and non-verbally.

Inmates communicated their intent to a variety of people. Seven (18.9%) chose a correctional officer, 4 (10.8%) a cellmate, and 3 (8.1%) another inmate. In 2 cases (5.4%), the inmate’s mother was the recipient and one (2.7%) told the sentencing judge. Five (13.5%) stated their intent but did not direct the communication to anyone in particular. Eighteen (48.6%) communicated their intent sometime within the week before suicide. Interestingly, sixteen
(43.2%) communicated the intent in such a way that someone could have reported to mental health and or administration. Six (27.3%) wrote suicide notes that were not discovered until after the inmate’s death. Reports of suicidal intent were made in only 5 cases (13.5%). All 5 reports were made promptly The communication was reported to mental health staff in 2 cases (5.4%), correctional officers in 2 cases (5.4%), and an unknown recipient in the last case (2.7%). Preventative action was taken following 3 out of the 5 reports (8.1%). No action was taken in 2 of the cases (5.4%). In one case, a mental health provider declined to reinstate a suicide watch for an inmate who was making suicidal comments and who had been on suicide watch before. Though reports were made in only 5 cases, there were 16 cases (43.2%) where a report could have been made.

**Suicide Watch:** No inmates were on suicide watch at the time of suicide. However, 15 (40.5%) had been on suicide watch at some time while incarcerated. Twenty (54.1%) were never placed on suicide watch, and information regarding past suicide watch was unavailable for 2 (5.4%). Nine (24.3%) had been on suicide watch on only one previous occasion. The other six accounted for 19 different suicide watches: 4 (10.8%) were on suicide watch two different times, 1 (2.7%) was on suicide watch four times prior to death and another inmate (2.7%) had seven prior periods of suicide watch. Systematic records were not available regarding suicide watches.

**Method of Suicide:** Inmates committed suicide using a variety of methods (see Figure 1). Hanging was the most common method, accounting for 30 out of the 37 suicides (81.1%). Three (8.1%) died from overdose of some type of medication: one (2.7%) on Thorazine and the remaining two (5.4%) with somatic medications. One ingested a very large amount of aspirin, while the other used verapamil and captopril. Other methods included jumping from a high
location (2 inmates [5.4%]), self-asphyxiation (1 inmate [2.7%]), and cardiac tamponade (1 inmate [2.7%]).

**Time of Day:** Suicides did not occur more frequently at any specific time of the day. The time of occurrence was fairly evenly spaced and there was no distinguishable pattern.

**Discussion**

The general profile of the inmate who committed suicide was that of a young (21-40 years) Caucasian male with less than a high school education. He was not married or romantically involved, indicating no anchor points in family or relationships. Over 73% suffered from an Axis I mental disorder and a substantial number also had a personality disorder. Over 90% had a history of substance abuse, especially alcohol, with onset in adolescence. Approximately two-thirds of this population had a history of prior suicide attempts. Life stressors such as new charges or convictions often precipitated the suicides. Symptomatically, these inmates tended to suffer from depression, delusions, hallucinations and or anxiety immediately before suicide. No systematic information with regard to pre-incarceration mental health care was available.

At the time of the suicide, the inmate was likely to have been housed in a single cell in the administrative segregation unit of a maximum-security prison. Most importantly, many of them were transferred between correctional facilities within four months of suicide. The inmate likely communicated his intent to do self-harm by verbal and/or nonverbal means but rarely was a report made which resulted in any meaningful action. Death resulted from hanging in approximately 81% of the cases and the most common ligature was a bed sheet.
An interesting finding from our study was the time of occurrence of suicide. It is widely reported that most suicides in prison occur in weekends, evenings and holidays, but there was no discernible pattern in our study.

Finally, the suicide rate in our system was lower than the generally reported rate of suicide in state prisons, though not significantly. It is well known that the rates fluctuate from year to year as is noted in Table 1. Although no explanation for this finding is offered, comprehensive prevention program reflects adequacy of mental health and correctional services.

A well-designed suicide prevention program incorporates all aspects of identification, assessment, evaluation, treatment, preventive intervention and training of all medical, mental health and correctional staff (American Psychiatric Association, 1999; National Commission on Correctional Health Care, 2003). While the authors of this paper do not intend to discuss comprehensive prevention strategies in prisons, the findings of this study emphasize the importance of several key components which can be incorporated in suicide prevention efforts: A) screening, B) systematically obtaining mental health records from jails and outside providers, C) suicide risk assessment, D) clinical monitoring, E) administrative segregation monitoring and inter-facility transfer, and F) recognizing, tracking, and reporting communications of intent.

A) Screening

Screening is a crucial step in the identification of suicidal inmates, usually completed by the intake staff. The screening instrument should be sufficiently comprehensive to identify at-risk individuals. A complete history of any suicidal behavior, including all prior suicide attempts and/or periods of suicidal ideation (even if the inmate is not suicidal at the time of intake) should be gathered. The computer or Rolodex filing system must be checked to ensure that the inmate is not a returning offender who has previously been suicidal in the prison. Mandatory screening of
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all inmates for suicide intentions at the time of receiving has been implemented in 45 out of 50 state departments of corrections (Metzner, 2002).

**B) Outside mental health records**

Mental health and previous jail records must be made available to the current detention facility where the new inmate is held (Kerkhof & Bernasco, 1990). Because mental illness is so prevalent in this population, there are a fair number of inmates who receive mental health care from providers in the community or jails. For continuity of care in prison, it would be useful to have access to those records for ascertaining the type of diagnosis, time of diagnosis, and prior medication regimen and its effectiveness. There must be an organized system for requesting, receiving, reviewing, and filing these records.

**C) Suicide risk assessment**

When an inmate evidences suicidal ideation or behavior, a multidimensional suicide risk assessment form, adapted for use within corrections, should be completed (Simon, 2001). Inmates can be given a Suicide Risk Rating score of 1, 2, or 3 indicating the severity of suicide potential with three being the highest. In all cases where an inmate has a SR score, that score should be visibly placed on the inmate’s medical record. Inmates with a SR score of 3 must be carefully monitored as past suicidal behavior predicts future self destructive acts. Many prisons have established a clinical/administrative level committee consisting of Program Director, Medical Director, Psychiatrist, Health Services Administrator and Assistant Superintendent of Administration. All inmates who have been classified as SR3 should be placed on the committee’s agenda and discussed on a monthly basis. The changing needs of this group can be discussed on a regular basis and depending upon the inmates’ clinical needs further assistance can be provided.
When an inmate is suicidal at a receiving center, that information should be taken into account when determining a long-term arrangement. If a timid inmate reports suicidal thoughts and appears to be a target for bullying it is less likely that he or she would be placed in the general population. Similarly, if an inmate has a history of assault and battery and is openly homicidal he or she would not be placed in the general population, either. Once the inmate arrives at the secondary facility, that facility should be made immediately aware of the suicidal inmate’s clinical status.

Suicide watch: Based on suicide risk assessment, an inmate may be placed on suicide watch, a heightened state of monitoring by the correctional staff at predetermined intervals, such as every 15 minutes. Strict guidelines must be established with regard to who initiates the watch, how often the offender is monitored, what personal items are allowed in the cell, how the watch is terminated, and the procedure for follow up psychiatric and mental health contacts. In many cases, an inmate is placed on suicide watch but no record of the checks can be found in the file. These records become extremely important from a forensic and legal point of view if the inmate does in fact commit suicide.

D) Clinical monitoring

Clinical assessment for suicide risk is a continuous process, performed by all mental health and psychiatric staff and must occur at every clinical encounter. This clinical assessment will be instrumental in making decisions on medication changes, admission to inpatient facilities, placement on suicide watch, one-to-one therapy, or other interventional steps. Individual counseling not only provides the inmate with an appropriate avenue of self-expression, it allows clinical monitoring of the inmate as well. Since a substantial percentage of inmates who commit
suicide suffer from substance abuse and substance abuse related disorders, it is important to establish a substance abuse treatment program in every prison.

**E) Administrative Segregation Monitoring and Inter-facility Transfer**

As a suicide preventive measure, suicidal inmates should not be placed in segregation units since it is not conducive to promoting improved mental health. The National Commission of Correctional Health Care prison standards [2003] stipulate that suicidal inmates should not be housed or left alone unless constant supervision of that inmate can be maintained. If it is necessary to house an inmate alone, provision should be made for uninterrupted supervision and human contact. Additionally, regular rounds in the segregation area to screen inmates for suicidal intent and mental illness should be a standard procedure.

A formal procedure to seek input or clearance from mental health staff before a mentally prisoner is transferred to another facility must be established. If the system does not have an electronic medical record system, the inmate’s mental health records should be transferred promptly to the receiving facility. The transferred prisoner must be seen by a mental health professional within 24 hours and by a psychiatrist within 72 hours. After the initial contact, the inmate should continue to meet with these care providers on a regular basis. Finally, as a precautionary step, no prisoner on suicide watch should be transferred

**F) Handling Inmate’s Communication of Intent**

Approximately 60% of inmates communicated their intent to kill themselves, either verbally or non-verbally, in a variety of ways and to variety of people as our study has noted. Communications to outsiders may be difficult to track because often they do not take it seriously enough to report it to the prison. If an inmate commits suicide after such a communication, the friend or family member usually states that they didn’t think that the inmate was serious about
committing suicide. As it is not easy to convince fellow inmates to report communications a confidential system for reporting, preferably a written form, must be established so that inmates do not feel as if they are putting themselves in danger when making a report. Reporting should occur as soon as possible after the communication. A cellmate may confide in a correctional officer who should report any communication of intent to commit suicide to a mental health professional. Mental health professionals should confer with colleagues and prison administration. In every case, someone else should be notified. Ultimately, the report should be added to the inmate’s file and appropriate steps should be taken to ensure that the inmate is not at risk of harming him/herself.

**Conclusion**

Over 70% of the suicidal inmates studied suffered from a mental illness, but the remaining individuals presented with no mental health problems. As a result, not all recommendations for the prevention of suicide in prison can focus on mental health care. Preventative steps must also include regular and systematic training and education of correctional and mental health staff, development and implementation of sound and legally defensible policies and procedures of suicide observation, intervention and prevention, and procedures for handling inmates who are noncompliant with treatment programs. These steps along with other administrative measures related to offender management and staff recruitment are integral parts of a comprehensive prevention program in prisons. The current study did not shed any light on these components; however, the effectiveness of such measures should be studied. As noted by White et al. (2002), studying the pattern and occurrence of suicide over a significant amount of time (5 to 10 years) would yield valuable information regarding risk factors and the effectiveness of strategies implemented in a correctional system.
Table 1

*Suicides per Year in the Statewide System, 1992-2002*

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of suicides</th>
<th>Average census</th>
<th>Suicide rate (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>1</td>
<td>15,342</td>
<td>6.52</td>
</tr>
<tr>
<td>1993</td>
<td>1</td>
<td>15,711</td>
<td>6.36</td>
</tr>
<tr>
<td>1994</td>
<td>4</td>
<td>16,460</td>
<td>24.30</td>
</tr>
<tr>
<td>1995</td>
<td>3</td>
<td>18,314</td>
<td>16.30</td>
</tr>
<tr>
<td>1996</td>
<td>6</td>
<td>20,249</td>
<td>29.63</td>
</tr>
<tr>
<td>1997</td>
<td>1</td>
<td>23,108</td>
<td>4.30</td>
</tr>
<tr>
<td>1998</td>
<td>7</td>
<td>24,648</td>
<td>28.39</td>
</tr>
<tr>
<td>1999</td>
<td>4</td>
<td>25,430</td>
<td>15.72</td>
</tr>
<tr>
<td>2000</td>
<td>4</td>
<td>29,031</td>
<td>14.79</td>
</tr>
<tr>
<td>2001</td>
<td>5</td>
<td>28,139</td>
<td>17.76</td>
</tr>
<tr>
<td>2002</td>
<td>1</td>
<td>29,633</td>
<td>3.37</td>
</tr>
</tbody>
</table>

*Average rate for 1992-2002* 15.2/100,000 per year

*National suicide rate* 12.0/100,000 per year
Table 2

*Axis I Disorders*

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Number of inmates</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance-related disorder</td>
<td>16</td>
<td>43.2%</td>
</tr>
<tr>
<td>Mood disorder</td>
<td>12</td>
<td>32.4%</td>
</tr>
<tr>
<td>Schizophrenia or another psychotic disorder</td>
<td>10</td>
<td>27.0%</td>
</tr>
<tr>
<td>Anxiety disorder</td>
<td>3</td>
<td>8.1%</td>
</tr>
<tr>
<td>Adjustment disorder</td>
<td>2</td>
<td>5.4%</td>
</tr>
<tr>
<td>Paraphilia</td>
<td>1</td>
<td>2.7%</td>
</tr>
<tr>
<td>Impulse-control disorder</td>
<td>1</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

*Note.* These categories are not mutually exclusive.
### Table 3

**Axis II Disorders: Prevalence of Personality Disorders**

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Number of inmates</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antisocial Personality Disorder</td>
<td>9</td>
<td>24.3%</td>
</tr>
<tr>
<td>Borderline Personality Disorder</td>
<td>4</td>
<td>10.8%</td>
</tr>
<tr>
<td>Paranoid Personality Disorder</td>
<td>2</td>
<td>5.4%</td>
</tr>
<tr>
<td>Personality Disorder NOS</td>
<td>2</td>
<td>5.4%</td>
</tr>
<tr>
<td>Schizoid Personality Disorder</td>
<td>2</td>
<td>5.4%</td>
</tr>
<tr>
<td>Dependent Personality Disorder</td>
<td>1</td>
<td>2.7%</td>
</tr>
<tr>
<td>Passive-Aggressive Personality Disorder</td>
<td>1</td>
<td>2.7%</td>
</tr>
<tr>
<td>Personality Disorder w/ Mixed Borderline Schizoid Traits</td>
<td>1</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

*Note.* These categories are not mutually exclusive.
Figure 1

*Methods of Suicide*

- Hanging (81.1%)
- Overdose: General Medication (5.4%)
- Overdose: Psychiatric Medication (2.7%)
- Self-Asphyxiation (2.7%)
- Cardiac Tamponade (2.7%)
- Jumping from a high location (5.4%)
Figure 2

*Types of Communication of Intent*

Communication of intent

- 22 inmates
  - Verbal communication
    - 21 inmates
      - Verbal communication
        - 21 inmates (56.7%)
    - Non-verbal communication
      - Non-verbal communication
        - 4 inmates
          - Non-verbal communication
            - 4 inmates (10.8%)

*Note.* These categories are not mutually exclusive.
References


The manuscript “Suicides in a State Correctional System, 1992-2002: A Review” has not been published previously and it will not be submitted to another journal for consideration as long as it is under review by the *Journal of Correctional Health Care*. 