

ATLAS SAFETY & SECURITY DESIGN, INC.

REDUCING THE OPPORTUNITY FOR INMATE SUICIDE: A DESIGN GUIDE

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Special Issue on Jail Suicide:

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INTRODUCTION

Suicide is a legal and social problem that plagues the criminal justice system. Jails and police lockups were never historically built to provide the sophisticated components of classification, treatment, and observation that are now expected of them. Protecting inmates from themselves and others requires constant attention and observation as well as a thorough and professional classification system. Jails were constructed for the single purpose of detaining persons for short periods of time as they awaited their trials.

Now jails must be built and staffed to provide for the health, safety, and welfare of pretrial detainment and sentenced misdemeanants. Jails must also have the ability to isolate and identify the suicidal inmate.

During the last 30 years, the problem of jail suicide has become the subject of intensive research. Many social scientists have advanced theories about the causes of the problem and how it may be prevented. While progress has been made in understanding the complex nature of suicidal and in developing methods to identify and manage the suicidal inmate the importance of architectural design in preventing jail suicides has not been given adequate attention. In briefly conceptualizing the value of architectural considerations, we need to remember that suicide requires a means, and it usually requires solitude, or at least the absence of intervention for several minutes. It is theoretically possible to remove all possible means of suicide from within a cell, and to ensure the constant supervision by personnel should an attempt be made to commit suicide.

The only method of supervision which will ensure the safety of detainees is constant monitoring by someone who is physically present in the cell area. Not only would this guarantee the observation and prevention of suicide attempts, but could lessen the shock of being jailed by providing detainees with constant human contact. However, poor correctional design and layout have contributed to many jail and police lockup suicides. The ability to adequately supervise and monitor jail inmates is greatly influenced by the design and circulation patterns of staff and inmates. Thus, the importance of architectural design is highlighted.

Obstacles to Sound Architectural Design in Jails

The United States Correctional system is bursting at the seams. Over the past decade, the nation's prison population has almost doubled. In 1975, there were 240,593 inmates in state and federal prisons, while in 1986, there were over 546,649. In February 1978, there were 3,493 local jails (this figure does not include police lockups) and as of June 30, 1984 there were 234,500 detainees in jails.

One in every 500 Americans is currently behind bars. Only two countries-South Africa and the Soviet Union-have more prisoners per capita than we do. Prison and jail construction have been unable to keep up with space needs. In 1986, there were 546,659 state and federal inmates but only prison capacity space for 433,700, or short 112,959 beds. At \$80,000 for medium security construction per bed this represents a 90 BILLION DOLLAR expenditure just to play catch up. Data on jail space shortage is not even available at present.

The search for more prison space has made local jails more dangerous places.

Because prisons are packed, nearly half of the nation's jail inmates are convicted felons (as compared to pretrial and misdemeanants). Jails, like prisons, have become places of growing violence and despair.

With prison and jail construction falling further behind, the correctional facilities are getting older and older. As of 1980, 890 jails being operated were built before 1924, another 768 jails were built from 1925-1949 are still operating, and 1,182 jails operating were built from 1950-1969. Only 655 jails were built from 1970-1978. Thus 81% of the jails operating in 1980 were built before 1969.

The age of the facility has an impact on many safety issues. Since a majority of the facilities are over 30 years old, there are not provisions inherent in the design to accommodate change and improvements in systems and technology. The basic designs of older jails are linear in nature. This linear style makes it more difficult to reduce environmental factors that unfortunately encourage suicidal actions. The impact of this linear style is:

The difficulty in officer supervision. The limitations of a long rectangular housing unit limits the visibility by one officer to see into the cells. The officer is basically perpendicular to the cellfronts and only has a clear view of corridors and hallways. Thus, in many linear housing units which are double bunked or multiple man-cells or dorms, the patrolling officer must walk continuously down the halls and look directly into the cell front to be effective in watching and controlling inmate behavior.

The promotion of isolation. Linear design allows inmates to be unsupervised by staff for long periods of time. Most facilities are understaffed to begin with, so an officer making patrol rounds along with their other responsibilities may leave inmates to their own devices for long periods of time. The inmates behave differently when they are under constant visual surveillance and directly accessible to an officer for assistance.

Safety concerns. Inmates left unsupervised will usually create a safety concern issue. It may be fire, assault, gambling, sexual assault, medical emergency, or suicide. Linear facilities prevent ready detection and prevention of such safety issues due to the blocked visibility, the length of the corridors and use of effective detection technology (i.e. smoke detectors, CCTV). The time required for an officer to make rounds again to the starting point would take sufficient time to commit an assault, suicide, or start a fire.

Many older facilities do not have the benefit of operating a direct supervision jail because of the small number of cells, classifications requirements, or existing physical structure. The design of the correctional facility impacts the staffing and supervision capabilities. A linear designed jail with remote or intermittent surveillance cannot provide design direct supervision of inmates that a podular design direct supervision

housing unit can with the same number of staff or less. The linear designed cellhouse does not provide adequate visibility for an officer to monitor the inmate movements with the cellhouse, nor offer protection against inmate assaults, sexual misconduct, weapons manufacture, contraband smuggling, medical emergencies, and suicide.

The age of the facility has an impact on many life safety issues. Since a majority of the facilities are over 30 years old, there are not provisions inherent in the design to accommodate changes and improvements in systems and technology. The designs of the housing units and the setting of the buildings have undergone many changes from the old linear style of design. The older the facility, the less likely that fire safety, smoke detection, and evacuation equipment is available. Many suicides start off a fire to self-destruct or get attention. The fire can often turn into a major institutional tragedy with great loss of life and property. Older facilities often are not as efficient in the delivery of services and information. Thus, medical and psychological services that might detect abnormalities in inmates are not as accessible due to understaffing and poor design.

Older jails are traditionally built with open bar cell fronts that allowed natural ventilation before the days of air conditioning. These exposed bars are the means and opportunity to tie a knot unsupervised to commit a suicide. Many older cells have heating for the cells with hot water pipes and forced air. Grills for air ventilation and air return are often accessible to inmates by standing on the toilet or bed. If the openings are large enough to tie a shoe string around another unsupervised opportunity for suicide has occurred. Older cells typically have older stall toilets and sink fixtures and maximum security furnishings and finishes. The hardness of all the surfaces adds to the depersonalization and isolation experienced inside the jail or prison. Response time by staff to an emergency is often slowed down by the configuration of the layout and the number of older style turn-key door barriers.

The American Correctional Association (ACA) Standard 2-5173 requires officers to be stationed inside or immediately adjacent to housing areas, so that they can respond immediately to any emergency. The ACA Standard 2-5271 requires that officers be able to respond within four minutes to any health related emergency. If the design of the correctional facility does not permit clear visibility and easy access for officer rescue, the facility increases the risk for potential suicide. An officer who supervises 30 to 50 cells which are positioned off a long hallway cannot possibly supervise those inmates as closely as an officer who is centrally located in a housing unit and has a clear and unobstructed view of all cells, showers, closets, etc.

Officers working inside the housing unit of direct supervision jails or prisons are more likely to know their inmates better than officers supervising inmates in a remote supervision linear design style facility. The officer in a direct supervision podular design jail will be more cognizant of behavior changes in inmates, an important factor in detecting potential suicide. A direct supervision unit officer will more likely have a

closer, more concerned, mutual respectful relationship with inmates, considered to be an important factor in jail suicide prevention.

Years of experience and countless suicides and attempts have demonstrated that jails, prisons, and lockups seldom have adequate staff to provide the constant supervision needed for potentially suicidal inmates. It is critical, as new construction ensures that the most effective design and management style be used. Only by proper jail construction and good training and supervision will the incidence of suicides be lessened and costly lawsuits avoided.

Some noteworthy case examples of lawsuits are given below:

La Bombarbe v. Phillips Swager Associates, 474 N.E. 2d. 942 (Ill. App. 4 Dist. 1985) An Illinois appellate court has held that an architect's duty to design a building safe for its intended use is not so absolute as to render the designer of a jail liable for the suicide of an inmate who hanged himself from a grille on a duct. The court ruled that an architect is under no duty to design jail cells without grilles so as to avoid providing anchor points from which an inmate might hang himself. A duty of care does exist to protect an inmate against suicide, although such a duty in the past has been found to exist only with regard to the jailers.

Easterly v. Frank MasieUo, 501 So. 2nd 117 (Fla. 4th DCA 1987) was a suit against the architect for a design defect in a jail that allowed a prisoner to commit suicide by hanging himself. The complaint alleged that the design and engineering of the jail did not provide for a secure guard grille over the air conditioning duct in the cell. The architects were found eventually to be relieved of liability arising out of a patent defect in the structure after acceptance of the completed premises by the owner, Palm Beach County Corrections Department. The failure to include a grille over the vent created an obviously dangerous product, the respondents were permitted to use the patent product case law as a defense. While the architect escaped liability, the accepting agency needs to be alert to defects that it accepts from the contractor or architect.

The architect owes a duty to those who would be likely to use the structure to exercise care that the design is safe for building's intended users. Suicides in prisons, jails, and lockups are not so unforeseeable as to preclude the existence of a duty to protect against them. Architects should have a duty to design jail cells without fixtures, grilles and otherwise avoid providing anchor points from which an inmate might hang himself. The architect can also be sensitive in designing observability in the facility in the selection and design of stairs, glazing, doors and windows and housing layout design.

Suggested Strategies for Redesigning Jails

In the sections which follow, I offer a number of suggestions for the design of jail environments.

Recommendations for Retrofit of Existing Cells

- ◆ Replace existing holding cell metal bar doors with 1/4 inch scratch resistant polycarbonate glazing on the inside of door panel.
- ◆ Modify existing light fixtures, ventilation covers and all protrusions in all holding cells with security screening with tamperproof screens. Tamperproof screens are considered grilling that cover vents and ducts with a 16 mesh per square inch welded interwoven wire, which has no openings greater than 3/16 of an inch.
- ◆ A suicide room should have no electrical outlets.
- ◆ All exposed pipes, hooks, hinges, and catches from the cells should be eliminated.

Recommendations for New and Existed Cells

- ◆ New correctional facilities, and facilities with lockup cells should meet American Correctional Association Standards for Accreditation.
- ◆ The size of the cell should be the ACA minimum standard of 70 square feet.
- ◆ Ceiling height should be 10 feet to minimize the accessibility of the individual to the light fixture or smoke or fire detection equipment.
- ◆ It is preferred for suicide cells to have security windows with an outside view. The ability to identify time of day via sunlight helps reestablish perception and natural thinking, and minimize distortion. While it might appear this is coddling the inmate seeking attention, the glazing may be sand etched in order to prevent transparent observation of the neighborhood but still allowing natural light in.
- ◆ Cells should have the necessary artificial and natural lighting to meet ACA requirements. Fixtures should provide 20 foot candle of light 30 inches above the floor.
- ◆ Light fixtures should be recessed in the ceiling to provide ample light for reading, in addition to a low wattage bulb to be used as a night light. The lens cover must be polycarbonate. The fixture may be secured in a corner of the ceiling if properly anchored. No electrical outlet should be provided. If electric razors are permitted, the outlets should be outside the cells, beyond the reach of inmates. Officers should have to plug in the razors into the sockets.
- ◆ Rooms should be painted pastel colors not institutional green or stark white. Lead based paint should not be used.

- ◆ A suicide watch cell or suicidal housing unit in a lockup should be located as near as possible to a control room or nursing station to allow for good audio and visual monitoring.
- ◆ A suicide watch cell should have tamperproof electrical fixtures with control outside the cell.
- ◆ Padding of walls, while being a great idea, is not allowed in many states. If your state permits you to use padded walls, they must be of fire retardant materials that are not combustible and do not produce toxic gases.
- ◆ All exposed pipes, hooks, hinges, and door knobs from the cells should be eliminated.
- ◆ Corners of walls, ceiling, and floor of cells should have rounded edges for sanitary and safety reasons.
- ◆ Joints at the ceiling should be sealed with neoprene rubber to prevent gouging plaster between walls for the purpose of anchoring a hook through the wall and committing a hanging.
- ◆ A secure floor drain should be placed at a low slope in the floor to facilitate regular cleaning and hosing of the cell.
- ◆ The floor surface should be nonslip, treated concrete, tile, carpet, or other surface that can't be removed should be used.
- ◆ Doors for suicide watch cells should be a metal sliding type, and used with a polycarbonate viewing panel that provides a clear, unobstructed view of the room or cell. An alternative is to use detention screening which allows air circulation and allows other officers to hear "in-cell" noises.
- ◆ Doors should be electronically monitored for open/closed position and should be a sliding type (to reduce the opportunity of barricading the door or slamming it into the officer).
- ◆ Cell fronts could be concrete block and contain large poly-carbonate vision panels. One of the prime reasons for the continued use of metal cell bars was that it allowed audio monitoring and ventilation. However, this type of structure provides the opportunity for hanging. Cell bars can be covered with polycarbonate low abrasion panels on the interior of the bar structure.
- ◆ Rooms should have a smoke detector flush mounted in the ceiling, with an audible alarm at the control desk. Water sprinklers in jail cells should not be exposed. Some sprinklers have protective cones, others are flush with the ceiling and drop down when set off. The use of dry standpipes permits verification of fire emergency before water is released.
- ◆ Suicide watch cells should have an audio monitoring intercom for listening to calls of distress.

- ◆ Beds should be a solid concrete slab with rounded edges so that nothing can be tied to it. In a suicide cell, the bed should not have any exposed space under the bed, but filled to the floor. The bed should not have any slats, springs, ropes, or coils. A heavily constructed all plastic bed similar to the concrete slab bed type is satisfactory. The mattress should be fire retardant and not produce toxic smoke. The seam should not be able to be torn away and used as a cord for hanging.
- ◆ Toilets and sinks could be porcelain for general population inmates, with concealed piping. Suicide cells should have stainless steel combo toilet sinks, and outside control over water valves with concealed piping.
- ◆ Vents and ducts should be grilled with a 16 mesh per square inch interwoven welded wire mesh, which has no openings greater than 3/16 of an inch.
- ◆ Any shelf in the cell should have a solid, triangular end-plate, which prevent a noose from being applied.
- ◆ In general, housing unit and cells have clothing hooks. General population hooks should be a ball and socket type latch. Collapsible ratchet type hooks can be jammed to be rigid enough to support a hanging. The ball and socket type hooks cannot be jammed. There should be no use of "U" shaped towel racks from which a noose can be tied. Suicide cells should contain no clothing hooks at all.
- ◆ Mirrors should be brushed metal attached with tamperproof screws, not glass or plastic, which can be broken or melted down by inmates to make weapons to cut themselves or others.
- ◆ A computer logging system should be implemented in the suicide cells that records, for example with a plastic key, the location and time each cell was visited. The result is a paper printout of time and location of the supervision which will be critical documentation necessary for a successful defense against a lawsuit should there be a suicide attempt or suicide completion.

CONCLUSIONS

General conditions in most jails promote isolation and dehumanization through loss of control over one's environment. A rigid authoritarian structure can increase feelings of anomie, hopelessness, and depression, which are ingredients in consideration of committing suicide.

While the National Center for Institution Alternatives (NCIA) states that no jail can be made suicide proof, the Massachusetts Study disagrees. Under total surveillance, there is no way to complete suicides. Jails complain that physical and training improvements are too expensive, yet if they were told that the jail would prevent a \$600,000 or \$2 million lawsuit by not allowing that person to hurt himself, the jail administrator might seriously consider taking preventive and corrective action.

The best assurance against suicide is screening individuals to determine the suicide risk they present and then continually monitoring individuals at risk throughout the first hours of incarceration. Prevention can be accomplished by attempting to change the suicidal motivation or reducing the opportunity to commit suicide. Changing people's motivations is not very practical or realistic; changing the opportunity to commit suicide is more likely.

Reducing the opportunity does not imply the abuse of the use of isolation segregation cells, CCTV monitors, and intercoms. Often this technology is designed more for the convenience of jail personnel and not for the benefit of the inmate. These strategies may heighten the depersonalizing effects of confinement and increase feelings of aloneness and desperation.

Careful consideration of safety features in the architectural design can play a role in reducing the opportunities for jail suicide. The vast majority of suicides, 95%, are hangings (Massachusetts Study, 1984; NCIA, 1981). The recommendations in this report provide field tested techniques to reduce the opportunity the inmate has for hanging himself. Architectural design is an important and necessary part of a suicide prevention program. Until the standards for construction of lockups, jails, and prisons require suicide resistant design features, judges and court decisions will continue to set the pace for what is required. It is hoped for that future American Correctional Association Accreditation standards and state standards will have clear physical and managerial strategies as part of the accreditation and licensing process.

Many factors contribute to a prisoner suicide: sociological, environmental, managerial, and personality. The courts have not accepted excuses to reduce liability and accountability issues. The best way to protect the inmate from suicide, and the corrections system and staff from liability lawsuits, is by proper design, good training, and thorough suicide assessment. An ounce of prevention is worth a (legal) pound of cure.

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