

## **KEY POINT SUMMARY**

#### **OBJECTIVES**

The main objectives of this study were:

- 1. Identify security technology and/or architectural design risk factors for violence in public mental health and addiction treatment facilities.
- 2. Examine staff perception of those hazards and of potential control measures to reduce violence in the workplace.
- 3. Describe the process by which environmental hazard assessment findings are included in the hazard assessment and control phases of a comprehensive workplace violence program.
- 4. Propose a working paradigm for involving direct care staff in design and security assessment and procurement decisions in their facilities.

# Environmental Evaluation for Workplace Violence in Healthcare and Social Services

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### **Key Concepts/Context**

The purpose of this project was to contribute specific, evidence – based guidance to the healthcare and social services employer communities regarding the use of environmental design to prevent violence.

#### **Methods**

The study utilized two methods to collect data:

- A retrospective record review of environmental evaluations that were performed by an architect in two Participatory Action Research (PAR) projects for workplace violence prevention in 2000 and, in the second project in 2005.
- Focus group interviews of facility staff were conducted for duration of 75– 90 minutes. The focus groups included six to 12 frontline staff with no managers.

#### **Findings**

Findings were grouped according to their impact on access control, the ability to observe patients (natural surveillance), patient and worker safety (territoriality), and activity support.

Some of the design problems included poor lighting, ventilation, and layout of the space. Materials-related issues included open-hinged doors providing pinch points, sharp objects (including picture frames), furniture that could be used as a weapon, and so forth. There were only a few maintenance issues, mainly related to evidence of vandalism that had not yet been repaired. Some of the clinical design issues were





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the location of the nurses' station relative to patient day rooms and the relative strength or weakness of ward design for promoting patient/staff interaction and staff observation of patient activity. A number of access control issues were noted, including the security of medication distribution and the lack of separate visitor reception areas.

Within the category of natural surveillance, many offices and program areas lacked view windows, and some of the bedrooms were configured so as to make observation of and access to patients difficult. Finally, with regard to activity support, a number of issues were noted. These included inadequate recreation areas, congested dining areas, and limited program areas, in a couple of ATCs. Numerous materials—related items were noted, including noisy environments due to the use of hard surfaces, the need to replace glass with Lexan or tempered glass, and the elimination of sharp corners/edges that could result in serious injury if someone were pushed.

Regarding focus group findings, staff voiced concerns about natural surveillance such as blind spots and alcoves, which give patients an opportunity to hide. Additionally, staff reported poor lighting, which makes night checks dangerous related to poor visibility. Staff also described congested and slow elevators, which resulted in large groups of patients congregating in the hallways. Also, numerous concerns were mentioned about existing furniture, decoration, or architectural structure being used to make weapons or hide contraband. All four facilities reported concerns with technology, either lack thereof or faulty existing technology.

The environmental assessment findings reveal design and security issues that, if corrected, would improve safety and security of staff, patients, and visitors and reduce fear and unpredictability.

#### Limitations

The main limitation of this study was that of generalizability of the study findings. The facilities participating in this study might have some unique characteristics or organizational culture aspects that might not be found in any other facilities. Hence, any generalizing must be carried out with caution.

#### **Design Implications**

Healthcare and social assistance employers can improve the effectiveness of violence prevention efforts by including an environmental assessment with complementary hazard controls. This study demonstrates that engagement of the direct care workforce in understanding and evaluating the security and design issues involved in their day-to-day safety is an integral aspect of workplace violence prevention.