

ECN News

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OSHA & Worker Safety

Engineering Solutions to Workplace Violence

Prevent workplace violence via safety-enhancing design and equipment

A health care organization is a stressful and potentially volatile work environment—a fact that's no secret to anyone who works there. Many factors contribute to the volatility. Patients and family members, especially those facing emergencies, are in distress. They often encounter long waits in crowded waiting rooms. Some may be under the influence of alcohol or other drugs and/or suffering from untreated acute or chronic mental illnesses. Some may be carrying weapons. Gang fights can spill over into emergency departments. And the sheer volume of people—staff, patients, family members, and visitors—coming and going at all hours creates an overall unpredictability.

These conditions make health care workers vulnerable. Studies indicate that a substantial percentage of hospital staff have been physically assaulted at least once during their careers.¹ And, according to the latest Bureau of Labor Statistics reports, the total number of nonfatal injuries and illnesses resulting from workplace violence increased for the private sector in 2012. Meanwhile, also in 2012, the health care and social assistance sector has seen a 6% increase, to 19,360 cases.²

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Health care organizations must take steps to prevent violence.

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Such trends command the attention of the Occupational Safety and Health Administration (OSHA). “Our mission is to protect the American worker,” says Mary Hoye, area director of the OSHA office in Springfield, Massachusetts. Among other duties, she coordinates workplace violence (WPV) activities for the New England region. OSHA defines WPV as any physical assault, threatening behavior, or verbal abuse occurring in the work setting.

“It troubles me that many health care workers accept WPV as part of the job,” says Hoye. “Thus, they may ignore escalating behavior. I’ve also been shocked at the level of violence: bites, whiplash from hair pulling, a face smashed against a concrete wall, a stab with a full hypodermic needle. It’s disturbing to see this in a setting whose mission is healing.”

The facts are that some people have conditions or histories that prompt aggression, and family members may be experiencing anxiety or despair over the condition of a loved one—all risk factors for violence. Health care workers must protect themselves while also being sensitive to patients. It’s a delicate balance that requires a systematic approach to prevention and appropriate consequences for violence.

A comprehensive approach

“OSHA likes to see a comprehensive approach to any workplace hazard, which involves a three-tiered hierarchy of controls,” Hoye says. These three tiers are as follows:

- Engineering controls
- Administrative controls
- Use of personal protective equipment

Engineering away the harm

“Engineering controls” refers to any

Workplace Violence: Tools for Engineering It Out

Architectural adaptations that can be made to existing floor plans

- Closed-circuit television monitoring and video recording of high-risk units
- Electronic access controls for emergency treatment areas
- Metal detectors—installed or handheld, where appropriate—to detect guns, knives, or other weapons
- Enclosed nurses’ stations, deep service counters, or bullet-resistant, shatter-proof glass in reception, triage, and admitting areas or client service rooms
- Employee “safe rooms” for use during emergencies
- “Time-out” or seclusion areas with high ceilings without grids for patients who “act out”
- Separate rooms for criminal patients
- Comfortable client or patient waiting rooms designed to minimize stress
- Locks on counseling rooms, treatment rooms, staff bathrooms
- Efficient closers on doors (shouldn’t be too slow)
- Bright, effective lighting, both indoors and outdoors
- Minimal furniture, arranged to prevent entrapment, without sharp corners or edges and affixed to the floor, if possible
- Limited number of pictures, vases, or other items that can be used as weapons

Alarms systems/other monitoring/response devices

- Panic buttons (at nurses’ stations, triage stations, registration areas, hallways, nurse lounge areas)
- Handheld alarms or noise devices
- Cellular phones, especially for home-health workers
- Private channel radios
- Curved mirrors for hallway intersections or concealed areas

aspect of the built space or any device that removes a hazard from the workplace or creates a barrier between the worker and the hazard. When preparing for new construction, a team of architects, planners, and direct-care staff can create spaces that eliminate or reduce security hazards, merging knowledge of design, materials, and hardware with needs and objectives of each unit or area. Planners still have many options for enhancing worker safety (see “Workplace Violence: Tools for Engineering It Out,” above).³

Administrative tactics

After applying appropriate engineering controls, the employer should consider administrative controls, such as procedures, training, and maintenance. “Organizations may have engineering controls and procedures in place, but they may fail

during a WPV event if people have not been properly trained and are uncertain about what they’re supposed to do,” says Hoye. “In addition to training, a comprehensive WPV program includes appropriate reporting and record keeping.

“Because many health care workers accept violence as part of the job, when something happens, they take care of it—but then they don’t mention it to anyone,” Hoye says. “But if they do report it, it can become part of the record, and others can learn from it. The organization can also track patterns.” For example, Hoye notes, an organization may see that when the waiting room is very crowded, WPV is more likely and then in turn make changes in the waiting room. In this way, controls on the administrative level feed back into engineering controls.

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Personal protection

When administrative controls and engineering controls aren't enough, the employer should choose to equip staff with appropriate personal protective equipment. In the case of WPV, examples are bite-resistant sleeves or body armor, which may be needed in specialized settings such as prisons or juvenile detention centers, where the potential for violence is extremely high.

"I bring up these options at trainings so people will know about them," Hoye says, "though there are limits as to where such items might be used"—a point that illustrates the next lesson.

A custom-made approach

As The Joint Commission emphasizes in all areas of the environment of care, and as Hoye reinforces, there's no one-size-fits-all approach. What's needed in a prison or a large inner-city hospital will likely not suit a small rural hospital or a home health facility. An example: One safety measure often suggested for hospitals or mental health settings is minimizing the number of loose objects available and bolting furniture to the floor to prevent such items from being used as weapons. But this advice would not suit a home health setting, where one treatment objective is to provide a cozy and family-like atmosphere.

"We like employers to have a written program for WPV that grows from a risk-hazard analysis," says Hoye. "In such an analysis, a team made up of employees, management, and representatives from a variety of departments (security, HR, legal, clinical, and so on) identifies the most vulnerable areas and the most appropriate controls for the facility." She offers two examples of practical controls, gleaned from OSHA inspections (see



Staff should be able to signal for help.

"Practical Solutions to Violence Risks: Two Examples," right).

Down to basics

If an organization can implement only one engineering control to make workers, patients, and visitors safer, it should be a system for communicating a WPV emergency, says Hoye. Whatever the system is—customized to the needs of the facility—it should have two components:

- People must be able to signal for help when and where they need it.
- Those who receive the signal should know how to respond.

Some alarm systems are stationary; others are designed for workers to carry with them. Some are silent, while others are audible. A loud noise can deescalate a situation, but choices have to be considered in the context of the particular organization. The bottom line is to make sure employees are trained to use the signal system or panic button and to understand its meaning. That is, "If the alarm system is activated, what do I do?"

If an organization is in a position to implement additional engineering controls, Hoye recommends well-designed workstations, lockable staff bathrooms, and small, comfortable waiting rooms with minimal noise and minimal waiting time to help reduce stress. "Organizations can do these kinds of things with-

Practical Solutions to Violence Risks: Two Examples

Mary Hoye, area director of the OSHA office in Springfield, Massachusetts, coordinates workplace violence (WPV) activities for the New England region. Hoye offers two examples, gleaned from OSHA inspections, of practical solutions to mitigate some common risk situations:

- **Working alone.** In one residential health care setting, staff members often worked alone, and they had no way to summon help if a violent situation arose. The employer agreed to install panic alarms that allowed for rapid, reliable response. So although the workers were still alone, they had a means of summoning help.
- **Seeing what's coming.** In one hospital, a patient waiting in an emergency department examining room attacked a provider as she entered the room. The engineering response was to replace solid doors with opaque ones, maintaining privacy but allowing the provider to see where the patient is in the room before entering.

"These were fairly simple solutions that made a big difference," Hoye reports.

out rebuilding the whole facility," says Hoye. "It begins with understanding one's own workplace."

Engineering controls need to be maintained, of course. Alarm systems must be tested periodically. Key card systems must be monitored so access to private areas is appropriately limited. Burned-out light bulbs must be replaced promptly. And if there are physical changes in a facility (for example, new construction, reconfiguration of depart-

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ments), the security systems must be reevaluated and adapted to those changes.

“With any engineering control, you need associated training so staff know why you’re doing this, how it works, and how they’re supposed to respond,” says Hoye. “That’s why OSHA emphasizes the idea of comprehensive plans.” 

References

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