HOSPITAL EMPLOYEE HEALTH

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INSIDE

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NIOSH: Pregnant workers should avoid hazardous drug exposures

Proposed guidance backs alternative duty for reproductive safety

Even the best safety program can't eliminate the risk to employees handling hazardous drugs, so workers who are pregnant, trying to conceive or breastfeeding should be offered alternative duty, the National Institute for Occupational Safety and Health concluded in a draft guidance document.

This is the first such recommendation from NIOSH, and although it is voluntary guidance, it represents a strong endorsement of alternative duty for those with reproductive risks related to working with chemotherapy agents and other hazardous drugs.

"I really think it's essential that nurses take this risk seriously, be aware that you can't prevent all exposures, and consider alternative duty," says **Martha Polovich**, PhD, RN, clinical associate professor at the Georgia State University School of Nursing and Health Professions and a co-author of the Current Intelligence Bulletin.

> "I REALLY THINK IT'S ESSENTIAL THAT NURSES TAKE THIS RISK SERIOUSLY, BE AWARE THAT YOU CAN'T PREVENT ALL EXPOSURES, AND CONSIDER ALTERNATIVE DUTY."

Polovich, who is a liaison to NIOSH from the Oncology Nursing Society, calls the bulletin "an important step to improve the safety for health care workers handling chemotherapy."

The document stems from a progression of research. There are now multiple studies showing a dose-response association between occupational exposure to chemotherapy agents and chromosomal damage in workers[1] and the persistent

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contamination of surfaces in patient rooms, nurses' stations and hospital or clinic pharmacies.[2]

"There are dozens of studies still being published in the literature that show it's really impossible to have a clean workplace," says **Thomas H. Connor**, PhD, research biologist with NIOSH's Division of Applied Research and Technology, an expert on occupational exposure to hazardous drugs and a co-author of the bulletin. "You can have a pretty good workplace with low levels [of contamination], but there's always going to be some present."

NIOSH was accepting comments on the draft bulletin through March 24. *(See editor's note at end more information.)*

Is it necessary to have a special policy for pregnant workers if the goal is to protect all workers from exposure to chemotherapy agents and other hazardous drugs?

With a predominantly female workforce, hospitals have a large population of employees of childbearing age who could be impacted by a reassignment policy, notes **William Buchta**, MD, MPH, assistant professor of occupational medicine at the Mayo Clinic Medical College in Rochester, MN.

Mayo provides safety evaluations of the worksite of any concerned employee and urges employees to be diligent in reporting accidental exposures, he says. Mayo employees working with chemotherapy agents are offered annual medical monitoring, including tests of liver and kidney function and complete blood counts.

Those at higher risk of miscarriage receive temporary reassignment, and other pregnant employees who request alternative duty are typically accommodated after a consultation with employee health, Buchta says. But Mayo doesn't have a blanket policy of offering reassignment to women who become pregnant, and Buchta notes that many women prefer not to tell their employers and co-workers about a pregnancy until after the first trimester.

"I don't think we should be outing women on their pregnancies early to scare them about the potential exposures in the workplace," he says. "I think we should reassure them that we've done everything to minimize the risk."

Connor acknowledges that employers have an obligation to create a safe workplace for every worker. But there is no way to completely eliminate the risk of exposure — and the fetus is especially vulnerable to antineoplastic agents, which are chemicals designed to kill rapidly developing cells, he says.

"No one should have exposures or illness or injury when they're just doing their job. But there are certain risks that are greater during pregnancy," he says.

A review of studies found an increased risk of reproductive problems such as miscarriage and stillbirth among health care workers with long-term, low-level occupational exposure to hazardous drugs,[3] he notes.

Alternative duty

Federal law prohibits employers from requiring pregnant workers to accept alternative duty. The Occupational Safety and Health Administration's Hazard Communications standard requires employers to train workers about the hazards of chemicals they

work with and how to protect themselves.

To varying degrees, professional organizations have endorsed alternative duty related to reproductive risks. The American Nurses Association, Oncology Nursing Society and the American Society of Health-System Pharmacists state that employers should offer alternative duty to employees handling hazardous drugs if they are pregnant, actively trying to conceive or breastfeeding.

The American College of Occupational and Environmental Medicine (ACOEM) is less prescriptive, stating that "temporary reassignment should be recommended if the conclusion of the risk assessment is that there is exposure to a reproductive or developmental toxicant that cannot be adequately controlled through engineering or work practice controls alone."

Marian Condon, RN, MS, research associate with the Division of Occupational and Environmental Health at the University of Maryland School of Medicine, previously worked with the Maryland Nurses Association to

Health care jobs and tasks with potential exposure to hazardous drugs range from docs to support staff

Pharmacists, pharmacy technicians:
- Handling drug-contaminated vials
- Reconstituting powdered or lyophilized drugs and further diluting either the reconstituted powder or concentrated liquid forms of hazardous drugs
- Expelling air from syringes filled with hazardous drugs
- Compounding HD powders into custom-dosage forms
- Transferring drug solution to IV bag or bottle

Pharmacists, pharmacy technicians, nursing personnel:
- Counting out individual, uncoated oral doses from multidose bottles
- Unit-dosing uncoated tablets in a unit-dose machine
- Crushing tablets or opening capsules to make oral liquid dose
- Opening ampoules
- Preparing topical drugs

Nursing personnel:
- Administering antineoplastic drugs by injection (intramuscular, subcutaneous or intravenous (IV)), by inhalation or by nasogastric tube
- Spiking the IV set into an HD-containing IV bag (without a closed system)
- Priming the IV set with a drug-containing solution at the administration location
- Connecting and disconnecting the IV set to an IV pump or patient

Nursing personnel, support staff, housekeeping personnel, laundry personnel:
- Handling body fluids or body-fluid-contaminated clothing, dressings, linens, bedpans, urinals and other materials
- Handling contaminated wastes generated at any step of the preparation or administration process

Pharmacists, pharmacy technicians, nursing personnel, housekeeping personnel, environmental services personnel:
- Contacting hazardous drugs present on drug vial exteriors, work surfaces, floors, and final drug products (bottles, bags, cassettes, and syringes)
- Handling unused antineoplastic drugs or antineoplastic drug-contaminated waste
- Decontaminating and cleaning drug preparation or clinical areas
- Cleaning hazardous drug spills

Physicians, nursing personnel, operating room personnel:
- Performing certain specialized hazardous drug administration procedures such as intraperitoneal chemotherapy (in the operating room or other locations), bladder instillation, isolated limb perfusion

Support staff:
- Transporting hazardous [drugs] in the facility

Nursing personnel, housekeeping personnel, waste disposal personnel
- Transporting hazardous waste containers

Pharmacists, pharmacy technicians, nursing personnel, housekeeping personnel:
- Removing and disposing of personal protective equipment after handling hazardous drugs or waste.

Source: National Institute for Occupational Safety and Health, Current Intelligence Bulletin (draft), Reproductive Risks Associated with Hazardous Drug Exposures in Healthcare Workers and Recommendations for Reducing Exposures, 2015.

develop the ANA policy statement. NIOSH's pending guidance adds validation, she says.

"It provides a precautionary approach to protecting the breastfeeding infants and unborn offspring of hazardous drug handlers," she says.

An alternative duty policy should include a risk assessment of hazardous drugs used in the facility, identification of jobs or tasks that have the potential for exposure, and identification of safe jobs or tasks that could be an option for alternative duty, NIOSH says. The guidance also applies to men who are trying to conceive.

The agency maintains an updated list of hazardous drugs, many of which are used outside of oncology units.

The NIOSH guidance may encourage facilities to create a written policy for alternative duty, rather than relying on ad hoc decision-making, Polovich says. "That's the only way that you guarantee that a worker who requests alternative duty will get it," she says.

[*Editor's note:* The draft Current Intelligence Bulletin is available at www.regulations.gov under CDC-2015-0003-0002. Comments can be submitted on the site for Docket Number NIOSH-279.] ■

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Post-Ebola: OSHA steps of HCW involvement, says deadly virus falls under bloodborne standard

No citations, but bloodborne, PPE standards apply

When two Dallas nurses became infected last fall while caring for the nation's first domestic Ebola patient, the public grew alarmed about the possibility of spread in neighborhoods, stores and airplanes. But the U.S. Occupational Safety and Health Administration was concerned about a more present danger: Workplace transmission.

Two OSHA officials visited Texas Health Presbyterian Hospital but didn't conduct an inspection or issue citations. In conjunction with infectious disease experts from the Centers for Disease Control and Prevention, they identified weaknesses in infection control and personal protective equipment and provided advice, **Jordan Barab**, deputy assistant secretary of labor, told *HEH*.

"There were a number of potential issues. It wasn't so much a breach in protocol as not having the right protocol," he says.

Initially, CDC director **Tom Frieden**, MD, MPH, cited a "breach in protocol" as the source of the worker infections, a comment that angered nurses around the country because it seemed to be blaming the workers. Frieden apologized, and the agency subsequently revised its PPE guidelines and emphasized proper donning and doffing. As of late February, the CDC had not published the findings of an investigation into the transmission.

OSHA responded to the Ebola outbreak in the same manner as it would to a natural disaster, such as a hurricane or flood, says Barab. "It was a crisis and CDC was in charge," he says. "We did want to be there and provide any support to the hospital that we could, support for CDC, and to see what else we could learn."

Compliance check

That spirit has continued, as OSHA seeks to help hospitals improve their worker protections, he says.

"We're continuing to go into [designated Ebola] treatment or assessment centers around the country in compliance assistance mode," he says. "We want to make sure the hospitals know how to be in compliance."

In fact, current OSHA standards require hospitals to have adequate protections, including engineering and administrative controls such as properly ventilated isolation rooms, and training. Barab notes:

Ebola should be a part of bloodborne pathogen exposure control plans. Because Ebola is spread through blood and body fluids, it is covered by the Bloodborne Pathogen Standard. The exposure control plan should be comprehensive and should not just focus on personal protective equipment, Barab says. He also notes that unlike HIV and hepatitis, Ebola can be transmitted through vomit, perspiration and tears.

The OSHA PPE Standard requires employee understanding of donning and doffing procedures. A compliance directive issued in 2011 makes it clear that if employees don't know how to properly use the PPE, the employer can be cited for deficiencies in training. "The [compliance officer] shall determine whether each employee performs work requiring the use of PPE can demonstrate an understanding of the required training, and the ability to use PPE properly," the directive states. "Lack of an employee's knowledge in or use of, assigned PPE would be indicative that the employee has not retained the requisite understanding or skill." (www.osha.gov/OshDoc/Directive_pdf/CPL_02-01-050.pdf)

In the last fiscal year (October 2013 to September 2014), OSHA issued citations under the PPE standard to only three hospitals. During the Ebola crisis, OSHA released a matrix with detailed information about what type of PPE is recommended for various job tasks. (www.dol.gov/osha/pdf/OSHA_FS-3761_PPE_Selection_Matrix_-_Ebola_(11-24-14).pdf.) (*See related article below*.)

The OSHA Respiratory Protection Standard requires written procedures for proper use, cleaning and storage of respirators. A 2014 compliance directive states that inspectors should verify compliance through personal observation in a walk around and by interviewing employees. "Questions asked during the interview should focus on determining how familiar the person is with the respirator program and the use of the respirators at the particular workplace," the directive says. Four hospitals were cited under the Respiratory Protection Standard in the past fiscal year.

Meanwhile, OSHA continues to move forward on an infectious disease standard, which also would cover contact and aerosol exposures. (*See related story on page 43*.)

Travelers from Ebola-stricken areas in West Africa are being monitored for symptoms, which makes it less likely that a patient with a suspected case of Ebola will enter an emergency department without forewarning, Barab says.

But extra training and resources devoted to Ebola preparedness will lead to better infection control and worker protections, he says. "The measures that have been taken since [the Ebola transmission] should instill a pretty good level of confidence," he says. "We're much better prepared now than we were." ■

Ebola funds may bring new resources to protect HCWs, patients as $576 million distributed

Feds boost infection control, HCW training and PPE

Health care workers face infectious disease risks every day, but the Ebola outbreak put those hazards into a harsh, new perspective: You have protective gear, and if you don't wear it properly, you could die.

Public health officials hope to capitalize on the awareness that was raised in the Ebola outbreak to promote better practices during routine health care encounters. That effort is bolstered by an infusion of $576 million in federal funds for preparedness, with money for state and local health departments to conduct infection control assessments at hospitals, target gaps and improve health care worker training.

Hospitals also now have new guidance to help them select personal protective equipment. While employee health professionals are aware of the differences between face masks, N95 respirators and powered air-purifying respirators, with Ebola they suddenly had to determine if their protective apparel was protective enough.

Full protection meant no exposed skin, no penetration of microbes, no gaps in the seams. "Protective clothing in health care has been underappreciated," says **Maryann D'Alessandro**, PhD, director of the National Personal Protective Technology Laboratory

(NPPTL) of the National Institute for Occupational Safety and Health (NIOSH). "Since the Ebola response hit, we have been getting many questions."

Having the right protective apparel and donning and doffing procedures will help hospitals in the ongoing efforts to combat hospital-acquired infections, says **Anthony Harris**, MD, MPH, president of the Society of Healthcare Epidemiology of America (SHEA) and associate hospital epidemiologist at the University of Maryland Medical Center in Baltimore. "The advantage of Ebola preparedness is that it allows us to prepare for other potential outbreak situations," he says.

Training and protections for health care workers are receiving a burst of attention after a long period of cutbacks as hospitals and health departments faced financial constraints.

"Most hospitals have seen very limited to flat change in resources for infection control and hospital epidemiology in the last decade despite a dramatic increase in the issues that need to be dealt with on a day-to-day basis," says Harris.

Employee health professionals also felt the strain of developing Ebola preparedness plans, training health care workers on PPE, and monitoring returning travelers, tasks they carried out in addition to their ongoing responsibilities, notes **Dee Tyler**, RN, COHN-S, FAAOHN, executive president of the Association of Occupational Health Professionals in Healthcare (AOHP).

Many hospitals rely on help from local health departments for training and gear that would be needed in a public health emergency. But the per capita preparedness funding for local health departments fell from $2.07 in 2010 to $1.15 in 2013, according to the National Association of County and City Health Officials (NACCHO).

Preparedness funds support regional health care coalitions and local partnerships, where community hospitals can access training and share PPE, says **Katie Schemm**, senior program analyst for public health preparedness at the NACCHO in Washington, DC. "In order to successfully respond to a disease like Ebola, you want to have these relationships in place," she says.

> "THE ADVANTAGE OF EBOLA PREPAREDNESS IS THAT IT ALLOWS US TO PREPARE FOR OTHER POTENTIAL OUTBREAK SITUATIONS."

Ebola also prompted hospitals to purchase more protective PPE and re-train employees. Those expenses were especially high for hospitals that treated Ebola patients or agreed to serve as a designated Ebola Treatment Center.

"We are hopeful that an appropriate amount [of federal funding] will go to those hospitals which volunteered and invested significant amounts to become Ebola-ready and to those which actually cared for Ebola patients," **Roslyne Schulman**, director of policy for the American Hospital Association in Washington, DC, told *HEH* by email.

The National Institute of Environmental Health Sciences, a part of the National Institutes of Health, also received $10 million for safety training of hospital employees, first responders and other health care workers.

'Fluid-resistant' isn't 'impermeable'

The Ebola outbreak also has highlighted the more esoteric distinctions in personal protective equipment, particularly for gowns, coveralls and aprons.

The U.S. Occupational Safety and Health Administration (OSHA) published a PPE matrix, identifying which items of PPE should be worn for different tasks and hazards. It distinguished between "fluid-resistant" and "impermeable" apparel and gave specific parameters for fabric and seams, based on voluntary standards. (www.osha.gov/Publications/OSHA3761.pdf)

NIOSH followed up with detailed guidance — more information than many hospitals may have ever included in their decisions to purchase isolation and surgical gowns. Some considerations: Barrier properties, fabric strength, seam configuration, ease of donning and doffing, comfort, range of sizes, and integration with other PPE.

"The gown has to work with the gloves, the knee covers. The best way to identify those issues is to practice and train in the gear that you're going to ask people to use," says **Ronald Shaffer**, PhD, branch chief for technology research at NPPTL. "That's one thing the Ebola epidemic has caused people to think about."

Health care workers may believe

that any fluid-resistant garment would protect them from blood and body fluids, NIOSH said. But microorganisms can penetrate material even without liquid being visible, the guidance states. (www.cdc.gov/niosh/npptl/topics/ProtectiveClothing/default.html)

According to NIOSH, fluid-resistant means the fabric resists liquid penetration, but the liquid may still penetrate if under pressure. Impermeable means the fabric prevents liquid or microorganisms from penetrating.

More importantly, gowns have been tested using methods of the American Society of Testing and Materials (ASTM) for blood penetration (ASTM F1670) and viral penetration (ASTM F1671). In its Ebola guidance, Cal-OSHA required hospitals to use apparel that met those standards.

The NPPTL began developing guidance on protective apparel after the emergence of H1N1 pandemic influenza in 2009. Often, health care purchasers don't understand the descriptive terminology and protective qualities of different products, says Shaffer.

"Once a hazard is identified, we want to make sure there is protective clothing that will provide the protection they're looking for," he says. "We want to help employers ask the right questions when they talk to representatives of manufacturers of the products."

Those questions should stem from a risk assessment, including the tasks, hazards, and duration that the garment will be worn, Shaffer says.

The ANSI/ASTM PB70 standard classifies garments for their barrier protectiveness, grouping them in levels one through four. Only level four garments are tested for blood and viral penetration; levels one through three are tested for different degrees of water resistance.

There are no standards for surgical scrubs. And while new antimicrobial fabrics have been developed, their role in protecting against infection is still being evaluated. ■

Small business panel questions need for OSHA infectious disease rule, says expand BBP standard

Ebola outbreak shows risks to health care workers, advocates say

After listening to employers ranging from funeral directors and dentists to administrators of small hospitals and surgery centers, a Small Business Advocacy Review Panel advised the Occupational Safety and Health Administration to put the brakes on its infectious disease rulemaking.

The panel asked OSHA to halt work on a rule while it considers the infectious disease risk of different job tasks and work settings. If the agency moves forward, the panel suggested expanding the scope of the Bloodborne Pathogen Standard rather than creating a new rule, limiting the settings that would be covered, or even restricting the rule to training requirements.

In short, the panel's report reflected the sentiment expressed by small business representatives in four November 2014 conference calls that a new infectious diseases rule would be burdensome and unnecessary.

Health care facilities are already diligent in their efforts to comply with guidelines and rules from CDC, the Centers for Medicare & Medicaid Services, The Joint Commission, and state and local health departments, says **Dee Tyler**, RN, COHN-S, FAAOHN, executive president of the Association of Occupational Health Professionals in Healthcare (AOHP). Overlapping regulations can create confusion, she says.

"We do not believe that specific regulation by OSHA on infectious disease will significantly improve current efforts in healthcare institutions to prevent infection exposure to workers," she says.

Ironically, the small business review of the proposed infectious disease rule occurred just as two nurses became infected while caring for the nation's first domestic case of Ebola.

"The Ebola outbreak has been the strongest example of why we need an OSHA infectious disease rule to protect health care workers," contends **Mark Catlin**, health and safety director of the Service Employees International Union (SEIU).

"We had the [public] health officials and health care institutions primarily saying don't worry, everything's ready, no problem," he says. "Within less than a month, it was pretty clear that the health care

industry really wasn't prepared to protect workers from Ebola."

Mandatory vs. voluntary?

As OSHA considers how to move forward on the infectious disease rule, one question remains at the forefront: Are the current guidelines sufficient to protect health care workers?

The panel's report spells out that concern as OSHA's rationale for a new standard — that enforcement would improve adherence to infection control and result in a safer environment for both workers and patients.

"When these practices are consistently and rigorously followed, they have proven effective at preventing the spread of infections. OSHA believes that the evidence shows, however, that many employers do not consistently adopt or rigorously enforce these guidelines, leaving both workers and patients at risk of contracting infectious diseases," the report said.

An infectious disease rule remains a regulatory priority, according to the fall 2014 regulatory agenda.

While the Ebola outbreak highlighted the risk to health care workers, other non-bloodborne diseases such as avian influenza or multi-drug resistant *Staphylococcus aureus* (MRSA) present an ongoing threat, says **Jordan Barab**, deputy assistant secretary of labor, told *HEH*.

"We're in an age now where we have all kinds of infectious diseases that are antibiotic resistant," he says. "Those are obviously workplace hazards and OSHA needs to have the rules to ensure that workers are protected."

Barab notes that the small business representatives argued that they were already following voluntary guidelines — and, conversely, that it would be too burdensome to comply with the infectious disease rule as outlined in a draft proposal. The draft included requirements for employers to have a "worker infection control plan," annual training, and "medical removal protection" that would provide pay and job protection for workers furloughed because of work-related exposures or illness.

While The Joint Commission requires hospitals to follow appropriate guidelines, there is no avenue for workers to file a complaint if they feel they are not adequately protected, Barab says.

OSHA will consider the small business comments as it drafts a proposed rule, a process that may take at least a couple of years, he says. The small business review process is "only the first of many steps we go through in which we solicit public input," he says. ■

'Active shooter' scenario and violence prevention should be on every hospital's agenda

'Fascinating': Violence tied more to hospital security budget than to surrounding crime level

While nearly every hospital nationwide now has a plan in the event of an Ebola patient, few are prepared for a workplace threat that is becoming all too common: an active shooter or another kind of violent act.

Healthcare workers are about four times more likely to be injured from workplace violence and need time away from work than all workers in the private sector combined, according to 2013 U.S. Bureau of Labor Statistics.[1]

Brigham and Women's Hospital in Boston, MA, was the tragic site of an active shooter scenario in January when a middle-aged man walked into the hospital and shot the cardiothoracic surgeon who had treated his mother. The surgeon died, and the shooter then killed himself.

The danger could have escalated and worsened if it weren't for active shooter training the hospital had begun a few years earlier, says **Leonard Marcus**, PhD, lecturer on public health practice, department of health policy and management, Harvard School of Public Health in Cambridge, MA.

Still, the question many hospital employee health professionals might ask is "How can we help to prevent active shooters and violence in our hospitals?"

The first step is for employee health leaders to become actively involved in any emergency preparedness scenario that includes violence and to collect accurate

information about violent acts against workers, says **James Blando**, PhD, an assistant professor at Old Dominion University College of Health Sciences in Norfolk, VA. Blando has researched the issue, recently publishing a study about the barriers to programs preventing workplace violence.

Staff should report every incident — no matter how they might rationalize it, he says.

"The first barrier to preventing violence that we identified is underreporting of workplace violence," Blando says. "A lot of hospital staff told us that if you're really busy in health care, you don't feel motivated to fill out more forms."

This was especially true if they had reported previous violent acts, and nothing happened, he adds. (*See related story p. 46.*)

Violent acts unreported

Research has found that more than two-fifths of physical violence in hospitals is not reported.[2]

Employee health leaders could help promote a better reporting system and advocate for higher security spending, noting the financial benefits of making the workplace safer, including higher productivity, lower turnover, and less employee stress, Blando says.

"If employees don't feel secure, they're less productive," he adds. "Security in my view is a good investment, and studies clearly show that."

Another strategy for preventing violence and active shooter events is to put ample resources into well-trained campus security, Blando says.

With a brief literature review, employee health leaders could gather evidence about the benefits of enhanced security to present hospital decision-makers.

"What we found is violence in hospitals and the rate at which employees were injured was much more related to the security budget than to the crime level outside the hospital," Blando says. "That was a fascinating finding."

Blando and investigators found that hospitals with serious community crime problems, including gang violence, had an appreciation for good security and invested in top notch security. They also developed good relationships with local police and sometimes had tight security at entrances, requiring visitors to obtain a visitor's pass that would be the only way to enter corridors or operate elevators. They'd also check to make certain that visitors named an actual patient before giving them admission to the hospital.

"The hospital might be in a terrible area, but it had a very low assault rate," he says.

By contrast, researchers studied hospital violence in a rural area where there was very little community violence and found that there was a higher assault rate in the hospital.

"A lot of hospital chief executive officers would say to us, 'I don't need a strong security program – it's beautiful outside and there's farm land, why do we need to spend money on a security program?'" Blando recalls. "What one hospital CEO didn't know was that he had a security guard who had his neck broken from two guys having a fight in the emergency room after their dad was brought in for a heart attack."

The underpaid security guard was elderly and tried to intervene when he was knocked down and a vertebra in his neck snapped. At another rural hospital, a nurse was raped on the job, Blando adds.

"All of those things precipitated with the idea that 'We don't have a problem in this hospital,'" he says.

Strong security sends a message to staff that the hospital is safe, as well as to potential perpetrators that they might not be able to get away with something in this setting, Blando says.

Another strategy involves teaching hospital staff how to handle an active shooter or other violent encounter.

"It's impossible to prepare for every event," Marcus says. "Therefore, using an all hazards approach and identifying key risk factors provides opportunities to invest in strategies training, which are scenarios hospitals might confront."

For instance, Brigham and Women's Hospital had earlier developed a training video about an active shooter scenario, Marcus notes.

Training similar to actual incident

"It's extraordinary that the training video's scenario was almost exactly the scenario that actually occurred, which was having an angry individual with a gun going into the very building [featured in the video]," he says. "When the event occurred in Boston they were ready to go into immediate preparation, and everyone knew what to do."

The video advises employees to run, hide, and fight, with an emphasis on running and hiding. Fighting is only a last resort when cornered.

However, this approach when it

comes to a shooter is controversial and not evidence-based, says **Michael Dorn**, executive director of Safe Havens International of Macon, GA.

Dorn is a former police chief who has been in multiple active shooter situations and has trained police, schools, hospitals, and others how to handle them.

"We do a lot of security assessments, including simulation," Dorn says. "Our film unit recorded 80 different crisis situations, and we found that people who have seen that video respond worse than people who don't see anything at all."

With some training programs, people move to fight when it's not the best option, so employee health leaders should be cautious when selecting a strategy for training staff, he says.

"Close quarter combat can't be boiled down to a 10 minute video," he says.

The best preventive strategy is to bring together hospital leaders, local law enforcement, and mental health experts to share ideas and develop a plan or discuss particular situations, Dorn says.

"Get different viewpoints and evaluate situations where someone has made some kind of communication, written down something or put something in social media or had behaviors that people find concerning," he advises.

Although an FBI study released Sept. 24, 2014, identified 160 active shooter events, killing or injuring more than 1,000 people, between 2000 and 2013, active shooter violence is still less likely than other types of violence, Dorn says.

"Twice as many people are beaten to death with hammers and other blunt objects than were killed by rifle fire," he notes.

In addition to staff training and increased security presence, metal detectors — at least in the emergency department — are a good option, Blando notes.

Few hospitals have metal detectors, often citing concerns about creating a less inviting environment for patients and visitors, Blando says.

"But the few studies that do exist show that use of metal detectors in an emergency department is appreciated by patients and families when there is proper explanation," Blando says. "They felt it made them safer, so that's what we would argue to management — that this is really useful in a security program and good customer service." ■

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Common barriers to workplace violence prevention include lack of incident follow-up

Safety should trump costs, but even violent patients may be valued as customers

Nurses and allied health professionals are at increased risk of workplace violence, and yet there remain challenging barriers to preventing violence in the hospital setting, researchers report.[1]

"We all know it's a problem, but the next step is: what are people doing about it, what is effective, and what isn't effective?" says **James Blando**, PhD, lead author of the study and an assistant professor at Old Dominion University College of Health Sciences in Norfolk, VA.

Barriers to preventing workplace violence include:

Lack of action following reporting incidents and different perceptions of what constitutes violence: Nurses and other health care professionals will fail to report violent acts when the prevailing attitude is "this is just part of the job."[1] Hospitals that fail to provide adequate communication and follow-up with employees who take time to report violence are reinforcing the idea that it's not worth the effort to report every incident, Blando notes. Also, nurses will excuse the behavior of patients, particularly when the patient has a mental illness, he adds.

"We found that behavioral psychology nurses in mental health wards tend to interpret everything

in terms of the person's disease," he explains.

They don't call security when they should and fail to report aggressive and violent incidents because they don't see these as violence, he adds.

For example, Blando interviewed a nurse who was stabbed in the back with a fork by a patient with dementia. The nurse didn't report the incident because she thought the patient didn't intend to hurt her. Her failure to report it resulted in a lost opportunity, as managers realized months later that giving dementia patients metal forks was a mistake.

"Maybe if it had been reported earlier, an intervention could have been instituted," Blando says. "Reporting violent acts is crucial, and some hospitals have done it effectively. It's important to hospitals in terms of decision making, so they can see which areas are at high risk."

Lack of management accountability and profit-driven management models: Hospitals should have committees addressing workplace violence, with at least half of the panel members comprised of people with patient care responsibilities, Blando suggests. This can be challenging since employees find it difficult to take time away from their patients to attend meetings, he notes.

"But if management isn't held accountable to do something about this, then you'll have decisions being made that do not include the best security decisions in a hospital," he adds.

This customer is wrong

Another barrier is the idea that patients and their families are customers, and the customer is always right.

"Lots of nurses reported to us that if you have a patient acting very aggressively complaints fell on deaf ears because this was a paying customer," he says. "The customer would be right even if off base. Also, in the U.S., we've had lots of reports of visitors being very problematic."

Dysfunctional families will complain to hospital management, or — worse — assault a nurse, and when the nurse reports this to police, the hospital might ask her to drop the charges so the patient/family member won't sue the hospital, Blando says.

"The nurse says, 'I was assaulted and want to press charges,' and the hospital says, 'Was there something you could have done differently?'" he adds.

Employees also told the researchers that their hospitals' focus on profits resulted in staff being cut at a time when more staff and security personnel were needed. This resulted in making the threat of violence even greater.

Weak social service and law enforcement approaches to mentally ill patients: Hospital employees often are at risk of violence from mentally ill patients. In some hospitals, local police bringing inebriated, high, and mentally ill patients to the emergency room, Blando says.

"Some places have great security programs, but if the police department is dumping people into their emergency department then the security program will be stretched," he explains. "They say, 'The government is closing state hospitals, and we're losing beds left and right, so what do we do with chronically mentally ill patients?'"

Also, every hospital should at least boost security in their behavioral health settings because these are at very high risk for violence, Blando says.

"This risk is compounded severely by the weakness of the social health care system," he explains. "We've had hospitals that take on average 48-72 hours to get someone screened, so you could have a behavioral health patient who is suicidal or homicidal, and there are not enough screeners."

The mentally ill patient would be forced to wait in the emergency department or in a hallway for several days — a worst-case scenario that could escalate the patient's frustration and lead to violence, he adds. ■

REFERENCE

1. Blando J, Ridenour M, Hartley D, et al. Barriers to effective implementation of programs for the prevention of workplace violence in hospitals. *OJIN* 2015;20(1): http://bit.ly/1Ea03z4

COMING IN FUTURE MONTHS

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HOSPITAL EMPLOYEE HEALTH

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CNE QUESTIONS

1. In a draft guidance document, the National Institute for Occupational Safety and Health recommended alternative duty for workers with potential exposure to hazardous drugs if they are pregnant, trying to conceive or breastfeeding because:

A. newer chemotherapy drugs are more dangerous.
B. hospitals are using a higher quantity of hazardous drugs.
C. the risk of exposure can't be completely eliminated even with protective measures.
D. federal law requires alternative duty.

2. What OSHA standards apply to Ebola preparedness at hospitals?

A. Hazard Communications, PPE standards
B. Bloodborne Pathogens, PPE, Respiratory Protection standards
C. General Duty Clause
D. Hazardous waste, Infectious Disease standards

3. Research has found that approximately two-fifths of physical violence in hospitals:

A. is not reported
B. could be prevented by metal detectors
C. is directly related to the crime level in the surrounding neighborhood
D. stems from a domestic dispute

4. James Blando, PhD, said every hospital should at least boost security in this setting:

A. emergency department
B. main entrance
C. top administrative offices
D. behavioral health unit

CNE OBJECTIVES

After reading each issue of Hospital Employee Health, the nurse will be able to do the following:

1. Identify particular clinical, administrative, or regulatory issues related to the care of hospital employees;
2. Describe how the clinical, administrative and regulatory issues particular to the care of hospital employees affect health care workers, hospitals, or the healthcare industry at large;
3. Cite solutions to the problems faced in the care of hospital employees based on expert guidelines from relevant regulatory bodies, or the independent recommendations of other employee health professionals.