HOSPITAL EMPLOYEE HEALTH

THE PRACTICAL GUIDE TO KEEPING HEALTHCARE WORKERS HEALTHY

## INSIDE



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# Gains Against Sharps Injuries Stall as Needlesticks, Exposures Increase

*AORN and EPINet report increases*

*By Gary Evans, Medical Writer*

Although there are individual success stories, overall needlesticks and mucocutaneous exposures to healthcare workers are on the rise, according to two leading surveillance groups.

The Association of Occupational Health Professionals in Healthcare (AOHP) recently released a report[1] on its EXPO-S.T.O.P. (EXPOsure Survey of Trends in Occupational Practice) for 2016 and 2017. Overall, there has been a 19% increase in sharps injuries over the last three AOHP surveys.

"We believe the stress, rushing, and fatigue that accompany higher workloads may be a contributing factor in the significant rise in sharps injuries," the authors concluded. "Under such stress, fail-proof and simple safety-engineered devices are crucial, as is competency-based training."

> "IT ISN'T ENOUGH TO SIMPLY PURCHASE DEVICES WITH SHARPS INJURY PREVENTION FEATURES — THEY MUST BE ACTIVATED AND DISPOSED OF SAFELY."

Study co-author **Terry Grimmond**, FASM, BAgrSc, GrDpAdEd, a microbiology consultant in Hamilton, New Zealand, said gains seen after passage of the 2001 Needlestick Safety and Prevention Act are not being sustained. In general, hospitals have adopted safety-engineered devices (SEDs), but some are not following the OSHA requirement to



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annually review new, safer devices like those with automatic needle retraction systems, he says.

"Inevitably, it comes down to resources — both staff and financial," he says. "The successful strategies are there. We need additional resources to purchase safer safety-engineered devices and to spend more on staff education and training. We need to move the culture to one that has a zero-injury objective."

Instead, there is an acceptance of some level of injuries and exposures at too many hospitals, he adds.

"It is unacceptable that healthcare workers think sharps injuries are part of the job," Grimmond says. "If no other industry tolerates such a safety culture, why does healthcare? If industry offices have large signs stating how many days since last 'lost day,' why don't hospital foyers?"

## EPINet Finds Similar Trend

Increases in sharps injuries and exposures also are reported by hospitals to the International Safety Center's Exposure Prevention Information Network (EPINet).

"The increases aren't subtle, either," **Amber Mitchell**, DrPH, MPH, CPH, director of the safety center, tells *Hospital Employee Health*.

For example, the 21.4 sharps injuries per average daily census (ADC) in 2013 rose to 33.8 in 2017, she says.

"We have seen the same disheartening increases for mucocutaneous exposure incidents," she says. "In 2013, there were 5.9 incidents per ADC, and in 2017, 10.1. These are often the most underreported, yet potentially hazardous given more than 50% are to unprotected eyes."

The selection of engineering controls and personal protective equipment (PPE) should be based on evaluations completed by frontline healthcare workers, she emphasizes.

"It isn't enough to simply purchase devices with sharps injury prevention features — they must be activated and disposed of safely," Mitchell says. "They also need to be immediately accessible so that there is no deterrence to use every single time they are needed."

Despite the overall trends, the AOHP reports success stories from employee health professionals who are showing these exposures can be significantly reduced. Indeed, replacing active safety devices with passive designs that automatically shield the needle led to a dramatic reduction in exposures at one hospital system. *(For more information, see related story on page 65.)*

"[These successful facilities] take this very seriously. I think organizations that don't do that are going to stay the same, or creep up in incidence," says AOHP report co-author **Linda Good**, RN, PhD, COHN-S, manager of occupational health services at Scripps Health in San Diego.

A common theme in less successful organizations is a lack of management commitment to prioritize needlestick prevention. "The leadership prioritization is number one in my mind, and everything kind of flows from that," Good says.

In education and training, one should not assume that the staff know how to use safety-engineered devices, she adds. As healthcare workers float to different areas of a hospital, they may end up using an injection device they are not familiar with, Good says.

"In a lot of the injuries that we are seeing, they have a safety-engineered device, but they are not activating it properly or in the proper sequence," she says. "It results in an injury before the needle is sheathed or retracted."

Next-generation products have come out in recent years that do not require the worker to activate a safety mechanism, but it takes careful planning to switch out safety-engineered devices.

"One of the challenges is that with group-buying contracts, they may not feel that they have the option of exploring other SEDs because it is not within the current group purchasing options," Good says. "It is part of the OSHA mandate that hospitals take a look at various options and use them if they are proven to be safer."

## HIV Complacency?

Development and adoption of sharps safety devices was driven in large part by the emergence of the HIV/AIDS epidemic in the 1980s and 1990s. It is difficult to overemphasize the fear of needlesticks when HIV was considered a terminal diagnosis. Now, it is a largely manageable, chronic disease. A recently announced national plan by the CDC and other federal agencies has ambitious targets of a 75% reduction in infections in the next five years and a 90% reduction in 10 years.[2]

The plan calls for an aggressive testing and treatment approach that links rapid HIV infection diagnosis with initiation of drugs that can reduce circulating virus to undetectable levels. There are approximately 1 million people living with HIV infection in the U.S., with some 40,000 new infections each year. Testing is a critical first step, as the CDC estimates that nearly 40% of people with HIV either do not know about their infection, or know but are not in treatment to suppress the virus. This group accounted for 80% of HIV transmission in 2016, the CDC reported. A higher titer of circulating virus presents greater risk to healthcare workers if there is a blood exposure to these patients such as needlesticks.

"The issue is that half of the people out there with HIV don't know it — and we don't know it," says **Karen Hoffmann**, RN, MS, CIC, FSHEA, FAPIC, president of the Association for Professionals in Infection Control and Epidemiology. "We can't be complacent."

Although a major concern early in the epidemic, hospital transmission of HIV now is exceedingly rare with standard precautions, sharps safety devices, and effective post-exposure prophylaxis treatments for exposed workers. In addition, more than half of people with HIV in the U.S. are under treatment, which means they pose virtually no risk of occupational transmission.

"Healthcare workers who are exposed to a needlestick involving HIV-infected blood at work have a

## TIPS TO REDUCE NEEDLESTICKS

A recent report[1] on needlesticks and blood exposures to healthcare workers cited some of the approaches used by hospitals that were successfully preventing many of these incidents.

"Our goal is to come up with practical strategies that people can actually incorporate into their own practice," says report co-author **Linda Good**, RN, PhD, COHN-S, manager of occupational health services at Scripps Health in San Diego. "To be able to offer tips from what others have done seems to resonate with the group."

Some of the tips and strategies suggested in the survey of members of the Association of Occupational Health Professionals in Healthcare included:

- Sharps safety education at hire, during unit orientation, every time an employee sustains an exposure, and through an annual refresher;
- An emphasis on coaching rather than a disciplinary approach;
- A "Go Slow With Sharps" campaign to raise awareness of risk;
- Standardizing a "Safe Zone" and a needle accountability process in operating room daily huddles;
- "Face Mask Is the New Glove" campaign;
- After an exposure, employee health explains to the healthcare worker how and why it occurred;
- Ask how could the injury have been prevented;
- If incorrect practices identified in a needlestick, share with group in case others are doing the same;
- All blood and body fluid exposures are reported monthly to environment of care, infection control, and process improvement. ■

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0.23% risk of becoming infected," the CDC reports.[2] "In other words, 2.3 of every 1,000 such injuries, if untreated, will result in infection."

There have been 58 cases of confirmed occupational transmission of HIV to healthcare workers in the U.S. Of these, only one confirmed case has been reported since 1999, the CDC notes. However, there are another 150 possible cases. The numbers also likely reflect some underreporting, as case reporting of occupational HIV is voluntary. Occupational blood exposures can transmit other pathogens and diseases, including hepatitis C virus. Still, the increasing management of HIV could invite complacency and diminished urgency in adopting needle safety devices.

"We continually remind healthcare workers that HIV treatment costs $400,000, and HCV costs $70,000 — who pays for this?" Grimmond says. "Hep C is on the rise, and they are at risk from 60 different bloodborne pathogens, including new ones like Ebola and Zika."

Another factor is the "tyranny of the urgent," says Good. "There are so many things that have to be reported at the state and federal level in terms of patient safety goals and infection rates. [Needlestick prevention] can sort of be shifted in priority."

Although it is unlikely that a needlestick will lead to seroconversion for HIV, HCV, or some other pathogen, the injured healthcare worker may have to wait for months in a window period before such infections are ruled out.

"It is still very stressful," Good says. "It becomes very important and life-changing — even if all is well six months later, the surveillance was done, and they dodged a bullet. It still had an impact on their life. It made them feel less safe at work and made them change their intimacy habits. It made them go on medications that have side effects. It is not without consequence."

## Eye Exposures

An emerging trend in both EPINet and the EXPO-S.T.O.P. data is that workers are suffering splashes of blood and body fluids to unprotected eyes.

"Employees who report mucocutaneous eye exposures report wearing eye protection as little as 3% of the time," Mitchell says.

An employee health approach cited in the AOHP data suggested looking at the problem as "the face shield is the new glove." *(See tips on prevention, page 63.)*

"Probably every hospital has a policy that says if you are going to be doing something that is splash-prone, wear an eye shield," Good says. "They leave it to the discretion of the healthcare worker to anticipate it. But they don't anticipate it, or else they would have put an eye shield on."

Breaking down the data, many eye splashes are being reported by workers treating patients on ventilators, she says. "Ventilators can pop apart and have body fluids aerosolized," Good says.

Another common task linked to eye exposures is emptying drains and catheters.

"I also see splashes removing an IV," she says. "It is not anticipated that when a needle is pulled from the arm, some blood will flick up into their eyes. Nurses don't tend to put on eye shields for discontinuing an IV."

Wearing eye protection when handling ventilators, drains, and IVs could eliminate about half of mucocutaneous exposures, she estimates.

"We are not telling people to always go around wearing an eye shield," Good says. "People should look at their own data and see what their workers were doing when exposed."

Again, it comes down to leadership, which can enact a policy for wearing eye shields for procedures identified as a splash risk.

"If that is not done, the splashes are going to keep happening because they are not anticipated," Good says. ■

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# Chicago Hospitals Dramatically Reduce Needlesticks

While national trends show sharps injuries are increasing, a 10-hospital system in Chicago reduced needlesticks by 70% after implementing a passive device that requires no action by the worker to trigger protection, *Hospital Employee Health* has learned.

**Dawn Lantz**, MSN, manager of employee health at Advocate Medical Group, spearheaded the effort after studying needlestick prevention as part of her master's degree in nursing. April 2019 marked one year since the last of the 10 hospitals had implemented the safety equipment.

The passive devices are more expensive, but that is balanced out by reduced costs associated with follow-up for needlesticks and administration of post-exposure prophylaxis, she explains.

"We are actually at a break-even point right now," she says.

Of course, that calculation does not include the mental anguish and emotional toll of needlesticks, as healthcare workers await word that they have not been infected with a bloodborne pathogen. Lantz described the project to *HEH* in the following interview, which has been edited for length and clarity.

**HEH:** What motivated you to take on the problem of needlesticks?

**Lantz:** When I first started here five years ago, I noticed we had a large number of needlesticks across our entire organization. We were averaging anywhere from 400 to 450 a year. I started looking into the trends and the highest numbers. A lot of our staff were being stuck for subcutaneous injuries; for example, giving heparin injections, insulin injections. There were a lot of unnecessary injuries.

I did my capstone project for my MSN on needlestick injuries. During my research, I found that the best practice out today is the passive safety device. The research has shown that passive safety devices can reduce needlestick injuries by up to 90%.

> "A LOT OF OUR STAFF WERE BEING STUCK FOR SUBCUTANEOUS INJURIES. THERE WERE A LOT OF UNNECESSARY INJURIES."

**HEH:** How did you present this idea to your hospital?

**Lantz:** I talked with the nursing executives, and we put together a multidisciplinary team to look at our injuries and identify what steps we could take to bring them down. The team consisted of nursing, employee health, patient safety, and supply chain.

In phase one, the team didn't feel we should move forward with changing products for multiple reasons. Of course, cost was a big one because passive devices are more expensive. Also, we were in a supply contract with a company that did not have a passive safety device. So we tried doing computer-based training [CBT] and assigned it to all nursing staff. This was training on how to safely use needle devices. We got 98% compliance of staff in reviewing the CBT and taking an after-test.

But on evaluation after three months, we found that needlestick injuries may be going up — not down. We brought the team back together, and at that point, it was decided that we would move forward with best practices research, which was passive safety devices.

**HEH:** After you brought in the manufacturer of the passive safety devices for a presentation to the team, you decided to go ahead?

**Lantz:** We had to do a whole crosswalk with all of our needles, and decided just to do subcutaneous injection first. We did an evaluation at one hospital first just to see how it would work. We brought in the vendor to do hands-on training. Our nursing team was also there to do hands-on training, which was mandatory. Every nurse had to be signed off on it. Now, every new nurse who comes in for orientation is trained the exact same way.

**HEH:** Can you explain how the needle in this syringe passively retracts?

**Lantz:** There is no mechanism and no action on the part of the user that they have to do to get the needle to retract. They just continue to push the plunger in and the needle automatically retracts at the end of the injection. They never see a dirty needle. After the [implementation] and training, I evaluated injuries for 30 days and we did not have one needlestick. We rolled it out systemwide one hospital at a time with the same training — hands-on, return demonstration, and sign-off. We currently are at a 70% reduction in needlestick injuries." ■

# Eight in 10 Critical Care Nurses Report Abuses

*Targeted by patients and family members*

A survey of 8,080 critical care nurses found that 86% experienced at least one incident of verbal or physical abuse, sexual harassment, or discrimination in the past year, the American Association of Critical-Care Nurses (AACN) reports.[1]

Patients and their family members were the primary source of all categories of abuse. An AACN survey found these incidents are less likely to happen when verbal and physical abuse policies were in place.

However, only 48% of participants said their organizations had a zero-tolerance policy against verbal abuse of staff, with 62% reporting a zero-tolerance policy against physical abuse, says lead author **Beth Ulrich**, EdD, RN, FACHE, FAAN, professor at Cizik School of Nursing at the University of Texas Health Science Center at Houston.

"The data from the AACN study is clear — the existence of zero-tolerance policies against abuse is significantly related to the amount of verbal and physical abuse which the nurses in the study experienced," she tells *Hospital Employee Health*. "All healthcare organizations should have zero-tolerance policies against the abuse of staff and enforce them. Organizations should educate their staff members on both the existence of the policies and on how to deal with and mitigate abusive behavior."

In a finding seen in similar studies, only 42% of the nurses who had experienced verbal or physical abuse, discrimination, or sexual harassment reported the incident to facility management.

"Among those who reported an incident, 55% said there was some discussion but nothing was done or there was no follow-up, 30% said the problem was resolved satisfactorily, and 4% said they were blamed for the incident," Ulrich and colleagues reported in the study.[1]

## Work Environment, Lack of Staffing Are Issues

The responses were different depending on whether the unit had implemented the AACN healthy work environment (HWE) standards, which include principles of skilled communication, true collaboration, and appropriate staffing.[2]

"For example, in units that had implemented the HWE standards, 50% of the participants said the problem was resolved satisfactorily, compared with 24% in units where the HWE standards had not been implemented," the researchers reported.

"As the evidence continues to mount on the relationship between the health of the work environment and patient and nurse safety and outcomes, many healthcare and nursing organizations and associations have increasingly addressed work environment issues," Ulrich says. "In addition, nurses themselves are speaking up when environments are unhealthy."

Overall, 60% of nurses responding cited a lack of appropriate staffing, which is a major driver of an intent to leave the job. One-third of respondents said they planned to leave their current job within the next year.

"Staffing is not just about the number of patients or the number of nurses," she says. "There are many more variables that need to be considered. AACN asserts that appropriate staffing requires an effective match between the individualized needs of the patient and family and the knowledge, skills, and abilities of the nurse."

AACN recommends that organizations involve nurses in all aspects of staffing, particularly planning and evaluation.

"Nurses who worked in healthier work environments were significantly less likely to express intent to leave," she says. "The responses from the participants who said they intend to leave their current positions on what would get them to reconsider leaving are informative."

The top response was better staffing (50%), followed by higher salary or improved benefits (46%), better leadership (44%), more respect from administration (42%), and more meaningful recognition (39%), she explained.

"In addition, intent to leave was significantly related to a nurse's perception of the overall effectiveness of his or her manager," Ulrich says. ■

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# Hospital Staffing Disclosures Are Alternative to Ratio Laws

*New Jersey law has increased staffing levels*

With states finding it difficult to pass nurse-patient staffing ratio mandates like the one in California, staffing disclosure laws in the name of transparency have emerged as something of a compromise, says **Pamela B. de Cordova**, PhD, RN-BC, professor of nursing at Rutgers University in New Jersey.

"The rationale behind it is to let patients and consumers hold hospitals accountable for poor nurse staffing," says de Cordova, lead author of a study[1] on the issue. "There is a fear of more stringent mandates, so this can be viewed as a compromise."

While insufficient nurse staffing is frequently described as a patient safety issue, it also has been linked to increased occupational injuries and healthcare worker burnout.[2-4]

Transparency through public reporting is a widely accepted approach to improve quality, and eight states have mandated some form of a staffing disclosure provision. New Jersey is one of the five states where staffing disclosures are required by the state health department, although facilities have some flexibility in how they provide the data. To assess impact, de Cordova and colleagues looked at trends at hospitals in New Jersey since the state implemented the law in 2008, finding moderate improvements in staffing in many key areas.

"Public reporting improved nurse staffing, but the level of that improvement is not really that big," she says. "But there was an improvement in 10 out of 13 specialties. The ballpark figures range from a 4% improvement in the emergency department all the way to an 11% increase in neonatal step-down units. Intensive care stayed the same, with a ratio of two patients per nurse over the seven-year study period."

WHILE INSUFFICIENT NURSE STAFFING IS FREQUENTLY DESCRIBED AS A PATIENT SAFETY ISSUE, IT ALSO HAS BEEN LINKED TO INCREASED OCCUPATIONAL INJURIES AND HEALTHCARE WORKER BURNOUT.

The study has sparked a state debate, as healthcare unions are lobbying for going beyond public reporting and mandating a nurse-patient ratio.

In an op-ed piece reacting to de Cordova's study, a union official concluded, "In addition to requiring hospitals to publicly disclose staffing levels, we still need to enact safe staffing legislation to guarantee that minimum staffing levels and nurse-to-patient ratios are set throughout the state — to protect our nurses and ensure patient safety."[5]

Taking neither a pro-hospital nor a pro-labor approach, de Cordova says her primary goal in looking at the data was to raise patient awareness.

"I want to get patients more engaged in this process, because public disclosure is a policy that has been used nationally to improve quality," she says. "It shows there was some improvement, and patients should know this information exists. I've gotten a little bit of backlash after putting this forward — but it's good. It really shows nurse staffing is an important point in improving quality in hospitals."

A common concern with reporting of quality measures is that the facilities that most accurately report their data may end up looking worse than those who somehow game the system.

"Public reporting has been criticized for that," she says. "Hospital administrators know that now their numbers are going to be publicly available. They want to be competitive with other hospitals that are geographically close to them. There is always the concern of gaming."

Although the study concluded the hospitals reported accurately, the issue is complicated by provisions in the New Jersey law that allow local flexibility in reporting data.

"There is a standard template for what hospitals need to report, but how those numbers are actually calculated varies," she says. "Is there a charge nurse who doesn't have a patient assignment calculated in? Is there a nurse on orientation

[counted] who is really just working with another nurse and is not assigned a patient? These factors can inflate the numbers to look like there are better ratios than there really are."

## ANA Seeks CMS Action

Still, some groups prefer the disclosure approach over mandated ratios that are seen as inflexible. The American Nurses Association (ANA), for example, is lobbying the Centers for Medicare & Medicaid Services (CMS) to make staffing ratios a reportable quality indicator nationally.

The ANA submitted comments to CMS in 2018 advocating for inclusion of nurse staffing measures for public reporting through the Hospital Inpatient Quality Reporting Program. CMS declined at that time, but the issue is not going away, with the ANA arguing that insufficient healthcare staffing results in costly delays of patient discharge.

"ANA strongly believes that these [staffing disclosure] measures contribute … to improved patient outcomes, empower patients and their families and caregivers, increase transparency with respect to care decisions, and do not present an additional or significant reporting burden for providers," according to an ANA statement.[6] ■

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# AOHP Updating Ergonomics Guidance

*A guide for new employee health professionals*

The Association of Occupational Health Professionals in Healthcare (AOHP) is updating its guidance on ergonomics for new employee health professionals, emphasizing the basics while providing links to key resources.

"Ergonomics is very important, and I am committed to it. It has been part and parcel to my own practice," says the author of the new guidance, **Alfred Carbuto**, MS, RN-BC, FNP, COHN-S, nurse practitioner in the Occupational Health Service at Montefiore Medical Center in New York City. "This will explain ergonomics for folks just entering the field."

Expected to be issued this fall, the update will reference the Occupational Safety and Health Administration (OSHA), which defines ergonomics as "the science of fitting the job to the worker. When there is a mismatch between the physical requirements of the job and the physical capacity of the worker, work-related musculoskeletal disorders (MSDs) can result."[1]

When looking at healthcare worker injuries, consider whether the work practice played a contributing role and how that may be mitigated.

"If you are seeing injured people, evaluate the injury and develop prevention measures," Carbuto says. "We don't want to fix broken people. It is better to prevent the injury."

That said, ergonomics goes beyond just "being careful," becoming part of a work culture to the extent it is emphasized and practiced.

"I think there has to be manager or corporate commitment to it, to data-gathering and breaking that down into different categories of injuries," he says. "I've been gathering data for years on injuries from falls, strains, contusions. Ergonomics is certainly as important now as it was when it was first brought up 20 years ago."

OSHA calls for assessment of work tasks that includes looking at factors like duration and frequency in light of known ergonomic stressors like force and repetition.

"About two years ago they tasked all employers with checking all walking surfaces to assess for hazards," Carbuto says. "Employers have to be proactive. Don't rely on data from injured employees, but go out to look at potential hazards."

Depending on the organization, employee health professionals may or may not be involved in these assessments.

"Even though an occupational health professional may not provide the direct evaluations, they will certainly be called upon as a referral when an employee comes with a complaint of some situation or awkward posture," he says.

At a minimum, employee health needs to be able to make the correct referral for ergonomic issues that go beyond the scope of their department.

"If their program doesn't provide that service, then who in your institution would be the resource person like an ergonomist or an industrial hygienist?" Carbuto says. "I think each place is going to be different, but the employee health professional has to be versed in this, at least, and find out who will be doing this if not them."

In general, many ergonomic injuries in healthcare could be prevented, says **Laura Punnett**, ScD, co-director of the Center for the Promotion of Health in the New England Workplace at the University of Massachusetts in Lowell.

"The need is enormous," she says. "These are the predominant type of injury in the healthcare sector. They very much impact direct care providers such as nurses, nursing aids, orderlies in hospitals, and other sectors like nursing homes."

## Q&A

*Hospital Employee Health* asked Punnett to comment further on this issue in the following interview, which has been edited for length and clarity.

**HEH:** Given the ergonomic injury levels cited, there seems to be a need for more understanding of the scope of this problem and how to prevent it.

**Punnett:** There is a tremendous amount of research and yet the problem is not going away. There is a gap between what we know scientifically and what is being done in practice. There has been quite a lot of research documenting the magnitude and the relationship between these disorders and patient-handling demands. Other factors you could look at as upstream determinants — the amount of patient handling, for example, and nurse-patient staffing ratios.

There is the direct cause — the biomechanical effects — and then preceding that there are these organizational issues that to some extent dictate how much of that exposure each individual nurse has. There are also intervention studies evaluating the effect of introducing multicomponent safe patient-handling programs. These have a very real benefit in reducing the incidence of problems, and the costs and the amount of time that nurses are off work. That, in turn, impacts staffing ratios until they are back at work.

**HEH:** In terms of safe patient-handling programs reducing ergonomic injuries, is it primarily an issue of acquiring the lifting equipment?

**Punnett:** I would certainly say that having good patient-handling equipment would be a key element to a program, but it is not sufficient. There are many stories of equipment being purchased and then not being used for a variety of reasons. It may be in the back of the linen closet, or the safe way of using it may require two people.

Sometimes, these are emergency situations where there is a patient on the floor and we have to get them up, so nobody had time to go get the lift. It is much more often things like the battery isn't charged, or the nurse can't find a clean sling. These "administrative" aspects of the program, if not taken seriously, will lead to the equipment not providing the benefit that it ought to.

Another issue is that patients are becoming heavier, so some equipment is not safe to use for very overweight patients. You need a variety of equipment available, and that can cause issues for storage space, which is always at a premium. The really convincing studies show that multicomponent safe patient-handling and movement programs are the ones that stand out. They incorporate the procedures and protocols for all of these issues that will affect whether the equipment is actually used once it is purchased.

**HEH:** What about moving patients in bed, which can lead to musculoskeletal injuries?

**Punnett:** There are times when alternatives are possible. For example, when moving a patient in bed, a whole-body lift isn't necessarily the device that you want. A frictionless sheet or slide board can be a low-tech, easily available device. This is one of the activities where nurses do get back injuries.

It is not only lifting people out of a bed or out of a wheelchair — leaning into the bed to push and pull and turn

someone can also put a huge strain on the lower back biomechanically. We have the technical research to show this. There are a variety of technical solutions, but we can't ignore the importance of the whole-body lifts for the patients who are bedridden.

**HEH:** Is it difficult to convince administrators of the value of preventing ergonomic injuries?

**Punnett:** It is really not. There are studies showing a fairly quick return on investment for a program that is implemented well. I think it is not so much resistance as lack of awareness. This is the gap I was referring to between the research and practice. That is really the gap we are trying to meet. ■

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# Attacks, HCW Deaths Undermine Ebola Response

Violent attacks on caregivers and other factors are contributing to the spread of Ebola virus in an outbreak in the Democratic Republic of Congo. The number of healthcare workers infected has risen to 81 (7% of total cases), including 27 who have died of Ebola, the World Health Organization (WHO) reports.[1]

A WHO epidemiologist was killed on April 19 in the latest in a series of attacks on care centers by armed militia in the warring region. In the lead-up to that incident, an Ebola care center established by the Doctors Without Borders volunteer group was destroyed. The CDC — the healthcare agency that has the greatest Ebola expertise in the world — was previously pulled from the DRC due to the security concerns.

As of April 2, 2019, a total of 1,100 confirmed and probable Ebola cases have been reported, of which 690 died — a case fatality rate of 63%.

At a WHO Committee meeting on April 12, officials decided not to declare a Public Health Emergency of International Concern (PHEIC). This follows similar inaction earlier in the outbreak, and some U.S. experts have strongly questioned what they perceive as "political" decisions.[2]

"It's definitely getting worse," says **Lawrence Gostin**, JD, a professor of global health law at Georgetown University in Washington, DC.

In what is likely to be a seen in future outbreaks, the DRC is suffering co-epidemics of disease and violence, he says. Rather than withdraw, the world must step in to secure the region and stop Ebola before it gets into more urban, mobile populations, Gostin argues. "Job one is to protect health and humanitarian workers," he says.

"We should never be in a situation where people have to put their life on the line to provide care," he says. "We should also quell the violence so the CDC can be back on the ground in the hot zone providing their expertise."

An ongoing UN mission preceded the Ebola outbreak, and they are there for general peacekeeping. They are not trained, nor do they have a specific mandate to protect healthcare workers, he explains.

"The potential for global spread is ever-present," Gostin says. "Certainly, the greater danger is to the region. Imagine if it gets across the border to Somalia or Uganda or to major cities — it would spread like wildfire. If it carries on the way it is, it will only be a matter of time before it appears in a major global city in the U.S. or Europe." ■

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# Drug-Diverting Nurse Linked to Infected Patients

*Index patients with no HCV risk factors triggered investigation*

An ED nurse in Washington state who admitted to stealing opioids and other drugs intended for patients has been linked to hepatitis C virus (HCV) infections in at least 12 people who sought care in the ED, the CDC reports.[1]

The nurse apparently was infected by diverting drugs from a patient with HCV, then infected other patients through contaminated syringes, needles, or vials, the CDC noted.

"This nurse, who had tested anti-HCV-negative and HCV RNA-negative with a blood donation in 2013, admitted diverting injectable narcotic and antihistamine drugs from patients for personal use during current employment at the hospital ED, though she did not specify the mechanism," the CDC found.

As with many other diversion outbreaks, the case may have been missed if not for the local health department, which identified two HCV infections in people with no typical risk factors in the first few months of 2018.

"Neither patient had behavioral risk factors associated with HCV acquisition," the CDC reported. "However, both had received injectable narcotic opioid drugs from the same nurse during separate visits to an emergency department at a local hospital on Dec. 6 and Dec.16, 2017."

Testing revealed that the HCV infecting both patients was genetically similar, suggesting a common source. Investigators found the nurse had accessed the automated drug dispensing system much more often than other staff. The nurse subsequently tested positive for HCV antibodies.

"It is possible that nurse A acquired the virus from [a] patient with chronic HCV infection during [a] Nov. 8 visit and was infectious during Nov. 22–Dec. 26, 2017, during which time at least 12 patients that she treated became infected," the CDC reports.

The investigation is continuing, with 33 more patients recommended for HCV testing. State nursing officials suspended the nurse's license. In light of the outbreak, the CDC recommends and reiterates the following:

- Monitor staff access to drug dispensing systems to identify staff members with higher or abnormal dispensing patterns;
- Prevent, identify, and report any loss, diversion, or theft of controlled substances as required by law.

## Opioid Bust Snares HCWs

In another development involving opioids and healthcare workers, 31 physicians, eight nurse practitioners, and seven pharmacists were recently arrested by federal authorities on charges of illegal prescribing and distributing opioids.[2]

Some of those cited in federal documents include two physicians and three pharmacists in Ohio charged with obtaining controlled substances by fraud.

"In one case, a doctor who is alleged to have been at one time the highest prescriber of controlled substances in the state, and several pharmacists are charged with operating an alleged 'pill mill' in Dayton, Ohio," authorities reported. "According to the indictment, between October 2015 and October 2017 alone, the pharmacy allegedly dispensed over 1.75 million pills."

In another case, a doctor and an owner of a Florida compounding pharmacy were charged in connection with a scheme that involved the payment of alleged kickbacks in return for writing prescriptions for compounded drugs that included controlled substances.

"In the Western District of Tennessee, 15 individuals were charged, involving eight doctors and several other medical professionals," according to a statement from the Department of Justice. "In one case, a nurse practitioner who branded himself the 'Rock Doc' allegedly prescribed powerful and dangerous combinations of opioids and benzodiazepines, sometimes in exchange for sexual favors."

Also, an orthopedic surgeon in West Virginia was charged with using fraudulent prescriptions to obtain tablets of acetaminophen-codeine for his own use. ■

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HOSPITAL EMPLOYEE HEALTH

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# CE QUESTIONS

1. **Amber Mitchell, PhD, director of the International Safety Center, said a rate of 21.4 sharps injuries per average daily census in 2013 went to what level in 2017?**

   a. 33.8
   b. 19.7
   c. 28.4
   d. Remained the same

2. **Linda Good, RN, PhD, COHN-S, manager of occupational health services at Scripps Health in San Diego, said which of the following was associated with splashes to the eyes?**

   a. Taking blood pressure
   b. Caring for burn wounds
   c. Caring for ventilated patients
   d. Working in a clinical lab

3. **After implementing a passive needle safety device that requires no action by the worker, sharps injuries fell by what percentage at a hospital group in Chicago?**

   a. 20%
   b. 35%
   c. 70%
   d. 90%

4. **Depending on the organization, employee health professionals may or may not be involved in assessments related to ergonomics. According to Alfred Carbuto, MS, RN-BC, FNP, COHN-S, employee health should, at a minimum, be able to do which of the following?**

   a. Make a referral to an ergonomics expert
   b. Explain the difference between torque and torsion
   c. Recommend whether a back brace is needed
   d. Identify risk factors at an employee work station

# CE 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.