25th Anniversary Issue

Hospital Employee Health®

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IN THIS ISSUE

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JANUARY 2007
VOL. 26, NO. 1 • (pages 1-12)

HEH at a crossroads: Hospital hazards come to the forefront

Health and safety become tools for recruitment, retention

Twenty-five years ago, hospitals didn't have safe needle devices or mechanical lifts. Employees weren't routinely required to have the rubella or measles vaccine. A new "mystery illness," which would later be identified as AIDS, created fear among health care workers, and hospitals were trying to define the role of the employee health nurse to address work hazards.

As *Hospital Employee Health* publishes its 25th anniversary issue, employee health professionals can take pride in their accomplishments, such as dramatic reductions in needlestick injuries. Yet challenges remain and hospitals continue to be high-hazard workplaces, with more injuries and illnesses than in construction and transportation.

"I don't think hospitals saw themselves as a hazardous industry. Their focus was on the patients," says **Kathy Harben**, the first editor of *HEH* who now is an enterprise communication officer for the Centers for Disease Control and Prevention Coordinating Office for Global Health.

But professionals in infection control and risk management had begun to grasp the link between patient safety and employee safety: The hospital had to be safe for both. "They were seeing trends that this was going

Congratulations on 25 Years!

This special issue of *HEH* reflects on 25 years of progress in hospital employee health. We chronicle the advances made in such areas as needle safety, latex sensitivity, patient handling, and ethylene oxide exposure. We share expert opinions on the steps that are needed to further reduce injuries and illnesses and provide up-to-date information on current concerns, such as influenza immunization and pandemic influenza preparedness. Hospital employee health remains a vital field — with many challenges ahead. ■

to be an important new area for hospitals to pay attention to," she says.

HEH reflected the needs of employee health professionals and their new organization, the Association for Hospital Employee Professionals (now called the Association of Occupational Health Professionals in Healthcare, or AOHP).

The first issue, in January 1982, reported on the new hepatitis B vaccine. It also outlined the minimal requirements that existed for hospital employee health: The Joint Commission on Accreditation of Hospitals (now called the Joint Commission on Accreditation of Healthcare Organizations) said a hospital's CEO should "determine the scope of the employee health program." Twenty-six states had no regulations governing hospital employee health, including immunizations of health care workers, and there were no federal standards directed at hospital-specific hazards.

Today, hospital employee health functions in a more regulated environment. Since 1981, there have been a total of 6,058 inspections in hospitals, resulting in 16,496 citations. As some hospitals became unionized, complaint-based inspections rose. In fiscal year 1982, the U.S. Occupational Safety and Health Administration (OSHA) conducted just 84 inspections in hospitals; in FY 2006, there were 165 inspections. Hospitals are among the high-hazard workplaces that may receive a targeted, wall-to-wall inspection if they have high injury rates.

Yet most hospitals never receive a visit from an OSHA inspector. The role of employee health goes far beyond meeting regulations; it's up to employee health professionals to communicate their value to hospital administration, says **MaryAnn Gruden**, MSN, CRNP, NP-C, COHN-S/CM, employee health coordinator at Western Pennsylvania Hospital (West Penn) in Pittsburgh and past executive president of AOHP.

"Most of us don't have the human resources we need to provide programs and services the way we would like to," she says. "So you do have to prioritize and you do have to pick your battles."

'One of most dangerous industries'

Although injuries and illnesses have declined, hospital employees still face significant hazards. The earliest data available on workplace injuries and illnesses show in 1993 that hospitals had a rate of 11.8 lost-time injuries per 100 full-time (FTE) equivalent workers, according to the Bureau of Labor Statistics. In 2005, there were 8.1 injuries and illnesses per 100 FTEs.

Throughout those years, overexertion in lifting has remained the primary cause of injury for hospital employees.

William Charney, DOH, was one of the first to press for ergonomic solutions to address back injuries in nursing. As director of safety for Jewish General Hospital in Montreal — the first safety officer at a hospital in Canada — Charney applied principles that were more common in industrial workplaces.

"[Health care] was one of the most dangerous industries in the United States and Canada, but it wasn't on anyone's radar screen," recalls Charney,

Hospital Employee Health® (ISSN 0744-6470), including **JCAHO Update for Infection Control** and **Bioterrorism Watch**, is published monthly by AHC Media LLC, 3525 Piedmont Road, Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodicals postage paid at Atlanta, GA 30304. POSTMASTER: Send address changes to **Hospital Employee Health**®, P.O. Box 740059, Atlanta, GA 30374.

Subscriber Information

Customer Service: (800) 688-2421 or fax (800) 284-3291. Hours of operation: 8:30 a.m.-6 p.m. Monday-Thursday, 8:30 a.m.-4:30 p.m. Friday EST. E-mail: customerservice@ahcmedia.com. Web site: www.ahcmedia.com.

Subscription rates: U.S.A., one year (12 issues), $469. Outside U.S., add $30 per year, total prepaid in U.S. funds. Discounts are available for multiple subscriptions. For pricing information, Call Steve Vance at (404) 262-5511. Missing issues will be fulfilled by customer service free of charge when contacted within 1 month of the missing issue date. **Back issues**, when available, are $78 each. (GST registration number R128870672.)

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This activity has been approved for 15 nursing contact hours using a 60-minute contact hour.

Provider approved by the California Board of Registered Nursing, Provider # 14749, for 15 Contact Hours.

This activity is intended for employee health nurse managers. It is in effect for 36 months from the date of publication.

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now a national consultant based in Seattle. "There was a lot of work to be done, and there was very little research in the field."

A 1972 survey by the National Institute for Occupational Safety and Health (NIOSH) found that only 35% of small hospitals had regular safety and health education programs, and only 39% of all hospitals had immunization programs for health care workers.[1]

Awareness began to build not only of the risk to hospital workers, but the cost of injuries and illnesses. In its 1988 *Guidelines for Protecting the Safety and Health of Health Care Workers*, the agency noted: "Compared with the total civilian work force, hospital workers have a greater percentage of workers' compensation claims for sprains and strains, infectious and parasitic diseases, dermatitis, hepatitis, mental disorders, eye diseases, influenza, and toxic hepatitis."[1]

Health care workers' unions and advocacy groups such as Public Citizen pressed for changes. They filed petitions with federal agencies, complaints with OSHA, and lawsuits.

"In 1976, NIOSH came out with a study saying the average hospital had twice as many chemicals as the average manufacturing facility. I was struck by that," recalls **Bill Borwegen**, MPH, occupational safety and health director for the Service Employees International Union (SEIU). "When I delved deeper, I realized that nurses' aides had the highest rate of back injuries of any occupation and nurses weren't far behind.

"All of that was exacerbated by the stress of working in an understaffed environment, which wasn't much different than it is today," he says.

Gaining recognition for employee health

The opportunity for improving employee health and safety has never been greater. With a nursing shortage and the aging of the nursing work force, hospitals increasingly recognize employee health as a tool for recruitment and retention.

Threats such as SARS and the potential for pandemic influenza highlight not only the risks to health care workers but the need to maintain an adequate work force.

"There's been increasing recognition, for a number of reasons, of the specific complexities of medical center worksites," says **Mark Russi**, MD, MPH, director of occupational health at Yale-New Haven (CT) Hospital and vice-chair of the Medical Center Occupational Health section of the American College of Occupational and Environmental Medicine. "I think people understand that there is a specific expertise that needs to be acquired to properly address the occupational medicine of health care workers."

AOHP now has a formal alliance with OSHA and a memorandum of understanding with NIOSH, evidence of the higher profile of hospital employee health. Employee health professionals need to keep on top of legislative and regulatory issues as well as CDC guidelines, and they need to provide that information as well as specific hospital data to administrators, says Gruden.

You can leverage your limited resources by tapping into other expertise within the hospital and forming interdisciplinary teams to tackle health and safety problems, she adds. "There's a lot of opportunity to become recognized within your organization," she says.

Most Common Lost Workday Injuries

1992
1. Overexertion in lifting
2. Fall on same level
3. Struck by object
4. Exposure to harmful substance or environment

2005
1. Overexertion in lifting
2. Fall on same level
3. Struck by object
4. Exposure to harmful substance or environment

Source: Bureau of Labor Statistics, http://stats.bls.gov.

Reference

1. National Institute for Occupational Safety and Health. *Guidelines for Protecting the Safety and Health of Health Care Workers* DHHS (NIOSH) 88-119. Washington, DC; 1988. ■

Needlesticks remain an employee health challenge

Success story is not yet complete

"Nothing will give me back my life as it was before HIV and HCV were a part of it. But I would like my experience to be used to prevent similar

A Timeline of Employee Health

April 1971: The U.S. Occupational Health and Safety Administration (OSHA) and the National Institute for Occupational Safety and Health begin workplace injury prevention efforts.

January 1981: A group of employee health nurses meet to form the Association of Hospital Employee Health Professionals, which later becomes the Association of Occupational Health Professionals in Healthcare (AOHP).

January 1982: *Hospital Employee Health* newsletter publishes its first issue, highlighting the new hepatitis B vaccine.

April 1982: *HEH* reports on a threat from a "mystery illness," which would later be identified as AIDS.

August 1983: *HEH* reports the first cases of occupationally acquired AIDS in health care workers.

July 1984: The Advisory Committee on Immunization Practices (APIC), an advisory panel to the Centers for Disease Control and Prevention (CDC), recommends the influenza vaccine for health care workers.

December 1989: *HEH* publishes its first salary survey. The average salary for an employee health director/coordinator is $35,384.

December 1990: The CDC recommends the use of "particulate respirators" to protect health care workers from tuberculosis.

March 1991: The Food and Drug Administration publishes an alert on the hazard of latex allergy sensitivity among health care workers.

tragedies from happening to health care workers . . ." — **Lisa Black**, RN, BSN, shared her needlestick experience with *Advances in Exposure Prevention* in 1999.

Needle safety is a major success story of employee health, although it's one for which the final chapter has yet to be written.

Health care workers once viewed needlesticks as just part of the job. Management considered needlesticks the fault of inattentive or careless employees. Meanwhile, in the 1980s, 12,000 health care workers a year were contracting hepatitis B from bloodborne pathogen exposures.

The U.S. Occupational Safety and Health Administration (OSHA) began requiring safer devices in 1991, but the Needlestick Safety and Prevention Act spurred a full-scale implementation. As a result, needlesticks declined by 51% from 1993 to 2001, according to EPINet data collected from a sampling of hospitals by the International Health Care Worker Safety Center at the University of Virginia in Charlottesville.

Melody Sands, MS, director of OSHA's Office of Health Enforcement, recalls sitting in a congressional hearing room, gazing at a poster-sized sign that contained a phrase from the OSHA bloodborne pathogen standard: Whenever engineering controls can be used to eliminate or reduce exposure, they must be used.

"I believe those words have resounded over the last decade," says Sands.

The bloodborne pathogen standard remains the most frequently cited OSHA standard in hospital inspections. Of the 138 citations issued last year, hospitals were most likely to receive a citation for having an inadequate exposure control plan or failing to use safety-engineered sharps devices.

More safety measures are needed

Needlesticks persist, both from safety-engineered devices and from devices that have not been converted for safety, at a rate of about 24 injuries a year per 100 beds, according to the most recent EPINet data. Making further progress is a challenge for hospitals.

"In the next 25 years, it's really important that exposure to all infectious diseases is not something we should become apathetic about," says **Amber Hogan**, MPH, who worked on compliance directives and the bloodborne pathogens standard while at OSHA. She now is manager of health care policy and advocacy at Becton, Dickinson and Co. of Franklin Lakes, NJ.

In fact, pioneers in the field of needle safety, such as **Janine Jagger**, PhD, MPH, director of the safety center at the University of Virginia, and **June Fisher**, MD, director of the TDICT (Training for the Development of Innovative Control Technologies) Project at the University of California at San Francisco, continue to work for improvements.

Peter Lurie, MD, MPH, was head of the staff union at San Francisco General Hospital when the AIDS epidemic began. Some nurses became so fearful that they quit rather than care for AIDS patients. "Ironically, the consciousness about HIV needlesticks was greater than the consciousness about other needlestick problems that had been around for a long period of time and killed more people," he says.

Lurie recalls reading that the risk of a health care worker contracting AIDS was equal to the lifetime risk of a firefighter or police officer

dying on the job.

"Those are viewed as dangerous occupations. I was doing one that was just as dangerous. That put it in perspective for me," says Lurie, who is now deputy director of Public Citizen's Health Research Group in Washington, DC.

In 2001, Public Citizen and the Service Employees International Union (SEIU) petitioned the FDA to ban some conventional devices for which safety-engineered alternatives were available. The agency denied the request in 2005.

"I still think there are lots of missed opportunities [to reduce sharps injuries]," says Lurie.

Here are some issues that needle safety experts say should be addressed by employee health professionals:

• Converting to safety devices in the operating room.

The first emphasis of needle safety involved hollow-bore needles, which are associated with the highest risk of transmission of bloodborne pathogens. However, the operating room is now the site of the greatest number of exposures, and surgeons have been reluctant to switch to blunt suture needles.

In 2005, the American College of Surgeons endorsed the use of blunt suture needles. A 1998 study by Jagger found that cuts or needlestick injuries occur in 1% to 15% of operations — and only 6% of those occurred during hand-to-hand passing of instruments.[1]

Surgeons need to participate in demonstrations of the newer blunt suture needles to be convinced that they do not adversely affect the surgical procedure and patient care, Fisher says. Employee health nurses should work with national professional organizations, such as the Denver-based Association of Operating Room Nurses (AORN), to promote safer OR practices, she says.

"You have to have champions who are willing to adopt appropriate new devices," Fisher says.

• Continuing to seek better devices.

Huge advances have been made in needle safety technology, with devices that are easier to use and less likely to fail. OSHA requires employers to consider new technology every year as part of updating the exposure control plan — but hospitals may not be adequately fulfilling that task.

"People have chosen their safety technologies years ago and are not becoming aware of the new technologies available to them," says Hogan.

Vendors can provide information on new devices. A starting point is the list of safety devices from the National Alliance for the Primary Prevention of Safety Sharp Injuries at www.nappsi.org/safety.shtml; the California Department of Health Services at www.sharpslist.org; or the International Sharps Injury Prevention Society at www.isips.org/safety_products.html.

• Getting buy-in from frontline workers.

If employees are disabling the safety features or failing to activate them, that may be a sign that they aren't satisfied with the device or weren't involved in the selection, says **Craig Molton**, senior industrial hygienist with OSHA. OSHA continues to get questions regarding the requirement for involvement of frontline health care workers in the selection of devices.

"The frontline people have to have a capability to say what will work for them," says Sands.

December 1991: OSHA issues the bloodborne pathogen standard requiring the use of safer needles.

July 1997: The nation's first ergonomics standard becomes effective in California.

September 1997: NIOSH warns health care workers about latex exposure.

September 1998: California sets a precedent with a law requiring hospitals to use safe needle devices.

November 2000: President Clinton signs the Needlestick Safety and Prevention Act.

November 2000: OSHA issues a comprehensive ergonomics standard requiring the assessment and abatement of hazards.

March 2001: Congress rescinds the ergonomics standard.

November 2002: The SARS outbreak begins in China. As the epidemic progresses, health care workers account for a third to half of cases in outbreak countries.

January 2003: Health care workers begin receiving the smallpox vaccine as part of bioterrorism preparedness.

December 2003: OSHA withdraws its proposed TB standard. Hospitals must now comply with the annual fit-testing requirement in the respiratory protection standard.

December 2003: The current outbreaks of avian influenza (H5N1) begin. Within three years, 256 cases and 152 deaths have been linked to avian flu.

November 2005: The U.S. Department of Health and Human Services issues its Pandemic Influenza Plan.

November 2006: An *HEH* salary survey reveals that 48% of employee health professionals earn from $50,000 to $69,999.

Hospitals may use one of many methods to solicit input, according to a Jan. 12, 2006, OSHA letter of interpretation, including: joint labor management safety committees; involvement in informal problem-solving groups; participation in safety meetings and audits, employee surveys, worksite inspections, or exposure incident investigations; using a suggestion box or other methods for obtaining written employee comments; and participation in the evaluation of devices through pilot testing.

"A simple open request for input is adequate," according to the OSHA interpretation, but that request must be "effectively communicated to employees."

While minimal input may satisfy OSHA, it is worthwhile to take the time and effort to involve frontline workers in the hands-on evaluation and selection of devices, says Fisher. The selection of the right devices will determine the success of your sharps safety program, she adds.

To help with that process, evaluation forms for the selection of safe sharps are available at www.tdict.org.

• Improving work practices.

Creating a culture of safety requires altering habits. It is a lot tougher than just buying new safety devices. Research shows that other aspects of the work environment may impact needlesticks. For example, a yet-unpublished study of 2,000 nurses in 13 health care facilities found a link between nurse-physician collaboration and nursing management and blood and body fluid exposures.

An earlier study found that nurses working in a unit with low staffing and a poor organizational climate were twice as likely to suffer a needlestick as those in well-staffed, well-organized units.[2]

Reducing needlesticks involves more than just following the steps of selecting and purchasing better devices, says Fisher.

"You have to look at stress, fatigue, staffing, hours worked, and you need to look at the work environment," she says. "They're all interrelated. You should begin to use a comprehensive approach to a safe work environment."

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Rapid response lowers HIV needlestick risk

Rural hospitals may not have PEP on stock

AIDS has forever altered the way health care workers view the threat of infectious disease. Although HCWs had long been at risk of contracting tuberculosis, hepatitis B, and other serious diseases, the AIDS epidemic in the 1980s brought a new level of fear — and a focus on the need for workplace protections.

As the AIDS epidemic changes, the challenge for hospitals is to continue to identify potential occupational exposures to HIV and to offer prompt post-exposure prophylaxis.

"There are changing demographics. There are still higher rates [of HIV infection] in cities, but there are increasing numbers of cases in rural vs. urban areas," says **Lisa Panlilio**, MD, medical epidemiologist with the Centers for Disease Control and Prevention (CDC).

Yet a small, unpublished study of rural hospitals found that many did not have adequate supplies of antiviral drugs that could be used for post-exposure prophylaxis (PEP) following a needlestick.

"There are a number of smaller hospitals and other settings where these drugs are not readily available and that's a concern," says **Ronald H. Goldschmidt**, MD, director of the National HIV/AIDS Clinicians' Consultation Center at the University of California at San Francisco, which runs the PEPLine advice call line for clinicians and conducted the study. Goldschmidt also is vice-chair

Reflections on 25 years of *Hospital Employee Health*

"*HEH* gave us a voice. [The newsletter] gave a cohesiveness to what we were doing and helped to set the standards of practice." — **Joyce Safian**, RN, FNP, PhD, the first executive president of the Association of Occupational Health Professionals in Healthcare, or AOHP (then called the Association for Hospital Employee Professionals).

of the department of family and community medicine at the University of California at San Francisco.

A low prevalence of HIV/AIDS in the community does not equate to zero risk, he cautions. "Most communities have someone who has [a risk from] substance abuse or sexual exposure to others," he says.

Nationwide, advances in needle safety, post-exposure prophylaxis, and other protective measures have significantly reduced the risk of HIV infection from a needlestick. Overall, there have been 57 cases of documented occupationally acquired AIDS/HIV infection. Another 140 health care workers contracted HIV, which is considered a "possible" but not confirmed case of occupational transmission.

No new cases of HIV seroconversion from bloodborne pathogen exposures have occurred since 2000. Only one possible occupational transmission has occurred in that time, according to the CDC.

The decline in seroconversions "indicates some really dramatic changes in health care," says Goldschmidt. The most obvious were glove use and safer needle devices. Hospitals installed more sharps containers and made them more convenient. Needleless IV systems virtually eliminated exposures from that source.

Meanwhile, antiviral medications have dramatically improved the lives of people with HIV infection, which means they are less likely to be treated in the hospital and overall they have a lower viral load.

"Overall, I think this is a huge success for a very strong CDC program toward reducing transmission in the health care setting," says Goldschmidt.

Rapid HIV testing lowers cost

Employee health continues to play an important role in lowering risk through post-exposure prophylaxis and rapid HIV testing.

The CDC still estimates the risk of contracting HIV from a needlestick to be three out of 1,000. The actual risk may be less than that, says Panlilio. But she also cautions that the CDC data on occupationally acquired HIV may be an undercount, as some health care workers may not report their positive HIV status even from an occupational exposure.

Starting post-exposure prophylaxis as soon as possible after an exposure remains an important way to prevent seroconversion.

"There's consultation that's available 24 hours a day [from PEPLine] and there are treatments that are readily available that every hospital should have," says Goldschmidt. "It remains important to start early.

"The CDC guidelines say [to start PEP within] 72 hours, but that doesn't mean you have 72 hours to give it. You should start as soon as possible," he says. "After 72 hours, there's no evidence that it helps."

For many health care workers, that means taking antiviral medications while awaiting the results of source patient testing. Rapid HIV testing is at least as accurate as the standard test and offers clear advantages, says Goldschmidt.

"[With rapid testing], you avoid the risks associated with taking post-exposure when it isn't really needed," says Panlilio. "It does a lot for reassuring workers that the employer is concerned about them as well."

BJC Healthcare in St. Louis converted its 13 hospitals to rapid HIV testing in 2004. Now, only 5% of workers who had a needlestick require PEP, compared to 26% who were started on PEP while awaiting test results.

Although the rapid HIV test is more expensive than the standard test, it has saved $500 to $1,000 per needlestick in costs for antiviral medications, additional lab time, follow up of employees, and physician consultation, says **Jo Grayson**, RN, occupational health supervisor at Christian Hospital Northeast in St. Louis and a member of the occupational health group that worked on the switch to rapid tests.

"The employees love it for the simple fact that they know they don't have to go on the medicines," she says. "They know within 30 minutes to an hour what the results are."

At BJC, employees can call an after-hours hotline when they have a blood or body fluid exposure. Occupational health nurses are on-call and

"The role has evolved into something that's very comprehensive. You need to be able to communicate what value you can bring to the organization, because no one else is going to do it for you." — **MaryAnn Gruden**, MSN, CRNP, NP-C, COHN-S/CM, employee health coordinator at Western Pennsylvania Hospital (West Penn) in Pittsburgh, past executive president of AOHP, and board member of *HEH*.

will help them through the post-exposure procedure, she says.

Meanwhile, new CDC recommendations on routine testing of patients for HIV status may alter the future of source testing. That would increase the likelihood that health care workers will know the HIV status of a patient when an exposure occurs.

[Editor's note: More information about the National HIV/AIDS Clinicians' Consultation Center at the University of California at San Francisco is available from www.ucsf.edu/hivcntr. The PEPLine number for consultation on post-exposure prophylaxis is (888) 448-4911.] ■

Hospitals lag in safe patient handling

Safer lifts are better for patients, too

Patient handling is the No. 1 hazard in hospitals. More nurses are losing time from work or filing workers' compensation claims related to musculoskeletal disorder (MSD) injuries than any other workplace event.

Add to that an aging work force, a growing national problem with obesity, and a nursing shortage, and it's easy to see why safe patient handling is gaining ground as a legislative initiative around the country.

Yet about half the hospitals and nursing homes in the country haven't established a safe patient handling program that includes lift equipment and other assistive devices, estimates **Audrey Nelson**, PhD, RN, FAAN, director of the Patient Safety Center of Inquiry at the James A. Haley VA Hospital in Tampa, FL. Others have taken only limited steps, she says.

"We now know what to do. Our big goal now is to get an even implementation of this across the country. That has not been achieved," says Nelson, a pioneer in the field who coined the term "safe patient handling."

Nurses and nurses' aides remain among the top 10 occupations with the most MSD injuries, she notes. "If there were a lot of facilities [implementing effective programs], you would expect [nurses and nurses' aides] to come off that list," Nelson says.

Enforcement has had minimal impact on hospitals. Two U.S. Department of Occupational Safety and Health Administration regions targeted hospitals as part of enforcement efforts, and six hospitals received letters warning them of hazards. No hospital has received citations related to patient handling hazards.

With no specific standard, OSHA must issue citations under its "general duty clause," which requires employers to maintain a workplace free of serious hazards. Instead, OSHA has relied on voluntary compliance, including alliances with organizations such as the Association for Occupational Health Professionals in Healthcare (AOHP).

Those programs may be increasingly effective as hospitals recognize other incentives to implement safer programs. Recent studies show that mechanical lifts benefit patients as well as employees. And reducing injuries saves hospitals money.

"I think in the future, programs will be more comprehensive, linking patient safety and worker safety together," says **Guy Fragala**, PhD, senior advisor for ergonomics at the VA's patient safety center. "That way we can integrate it into the culture of an organization."

Role models boost program

In the early 1980s, **Bernice Owen**, PhD, RN, conducted research on back injuries among nurses and wrote an article stating that a comprehensive program — including assessing patients' needs, using appropriate equipment, and having support from management — could reduce the injuries.

The *American Journal of Nursing* at first rejected the article. The reason: Reviewers said it wasn't possible to prevent back injuries.

"I wrote back to the editor and said, 'Did you read the article? This talks about changes and that we were able to reduce it,'" recalls Owen, who now is professor emeritus at the University of Wisconsin at Madison's school of nursing.

"I think there has been renewed attention to health care worker safety in the wake of Sept. 11 and the emergence of diseases such as SARS and H5N1 influenza. It's a field that has moved to the front burner." — **Mark Russi**, MD, MPH, director of occupational health at Yale-New Haven (CT) Hospital and vice-chair of the Medical Center Occupational Health section of the American College of Occupational and Environmental Medicine.

The *AJN* eventually ran the article as a cover story, with an accompanying editorial. The American Nurses Association became a strong proponent of safe patient handling programs.

Years of research have demonstrated that body mechanics cannot prevent injuries, but that mechanical and assistive devices implemented as part of a safe patient handling program can reduce MSDs by 30% or more.

"You can't just get the equipment and expect people to use it," cautions Owen. "People have to be trained, and there has to be some kind of monitoring that it is used and used correctly."

Employees can be trained to be mentors or role models, helping others adapt to the new equipment and reminding co-workers that they should use the equipment, says Owen. "If you could empower the people who are actually doing it and let them do the surveillance themselves, it worked better than having management do it," she says.

"Safety huddles" are a method promoted by the VA safety center to allow staff to share information about near-misses or safety issues, including back injury. Everyone involved in direct care in a unit should attend. They should be held at the same time every day, and they can last as few as 15 minutes, according to a VA guide.

Allow open discussion, without seeking "blame," on these questions:

- What happened to threaten patient or staff safety?
- What should have happened?
- What accounted for the difference?
- How could the same outcome be avoided the next time?
- What is the follow-up plan?

[Editor's note: The 2007 Safe Patient Handling and Movement Conference will be held March 12-16 at Disney's Contemporary Resort in Lake Buena Vista, FL. For more information, contact the University of South Florida, (813) 974-4296 or (800) 852-5362, www.cme.hsc.usf.edu/sphm/.] ■

Latex allergy has 'almost disappeared' among HCWs

Better gloves mean less sensitivity

Vendors really do listen to their customers. That is the lesson of the latex experience.

At its peak, about one in 10 health care workers (8% to 12%)[1] suffered from latex sensitization. But a shift to powder-free, low-protein latex gloves has allowed even latex-allergic employees to return to work.

As hospitals continue to evaluate alternatives to latex, they find few new sensitizations and higher-quality latex and nonlatex gloves.

"Latex allergy has very significantly declined and almost disappeared," says **Gordon Sussman**, MD, professor of medicine at the University of Toronto and staff immunologist and allergist at St. Michael's Hospital. He is a leading researcher of latex allergy among health care workers.

"It's because of initiatives of government, hospitals, and industry, which have changed their products. The exam gloves are 1,000-fold less allergenic and sterile gloves about 100-fold less allergenic [than they were in the 1980s]," he reports.

In fact, Sussman recently retested 30 health care workers with latex sensitivity. Two-thirds of them had lower sensitivity, he says. "In a few patients, the skin test had converted to a negative test," he says.

Although the FDA never finalized labeling standards for powder and protein in gloves, the industry established its own standards for gloves, Sussman says.

However, he cautions: "We don't want to let our guard down. Latex allergy can re-emerge if we don't continue with the vigilance. Although it's a happy ending, it may not be an ending if we don't keep up with the standards we've developed."

Employee health professionals should remain alert for symptoms of latex allergy, he says. Those include skin rash or inflammation, respiratory irritation, shortness of breath or wheezing or unexplained shock after contact with latex, according to the National Institute for Occupational Safety and Health, which issued an alert on latex allergy in 1997. The symptoms can appear within minutes or may occur hours later.[1]

Some hospitals have continued the quest for better gloves and latex alternatives. At Northeast Georgia Medical Center in Gainesville, a latex-safe unit was successful and the entire hospital now is converting to vinyl exam gloves. "It's better for the employees as well as the patients," reports **Cindy Taube**, RN, COHN-S, workers' compensation manager.

At Kaiser Permanente, the latex-alternative products committee continues to meet and review new glove technology. In general, the quality and cost of both latex and synthetic gloves have dramatically improved, says **Wendy**

Huber, MD, chair of the committee and chief of dermatology for South Sacramento Kaiser.

"It really [came] from a grass-roots effort in requesting products," Huber says. "If you ask for products, industry starts to respond."

Reference

1. National Institute for Occupational Safety and Health. *NIOSH Alert: Preventing Allergic Reactions to Natural Rubber Latex in the Workplace,* June 1997; DHHS (NIOSH) Publication No. 97-135. ■

CDC: Extend HCW flu shots through January

Supply delays may be business as usual

Hospitals are striving to vaccinate more health care workers against influenza than ever before, but this fall they struggled to get their campaigns rolling because of vaccine supply delays. The lesson of the season: Get used to uneven delivery of flu vaccine.

Manufacturers planned to deliver about 110 million doses — significantly more than the 85 million doses available last year. But large contract orders from grocery and pharmacy chains apparently received preference over the orders of individual hospitals, and some hospitals did not receive their vaccine until early November.

Julie L. Gerberding, MD, MPH, director of the Centers for Disease Control and Prevention, paid a surprise visit to the Healthcare Infection Control Practices Advisory Committee meeting in November to urge infection control and employee health professionals to adopt a continuous immunization program that stretches into January.

"There's been a mismatch between the supply of the vaccine and the distribution," Gerberding said. "We really have to work this year on extending the immunization season. No matter how much vaccine we produce, we're always going to have this problem of not being able to get it out from the manufacturer in the month of October."

Distributing such a large quantity of vaccine is a tough logistical issue, and Gerberding noted that the CDC has no control over the distribution patterns.

Hospitals and other health care providers need to understand the decentralized system that affects vaccine distribution, says **William Schaffner**, MD,

CNE *questions*

1. According to OSHA, which of the following satisfies the requirement for involvement of frontline workers in selection of sharps safety devices?
A. A survey of employees
B. A complaint box
C. A joint labor management committee
D. A & C

2. How many documented cases have there been of occupationally acquired HIV infection among health care workers since 2000?
A. 0
B. 1
C. 3
D. 15

3. According to Bernice Owen, PhD, RN, professor emeritus at the University of Wisconsin at Madison's school of nursing, what component of a safe patient handling program is important to boost compliance?
A. Policies that create consequences for failure to use equipment.
B. The availability of lift teams
C. Monitoring of equipment use through trained mentors.
D. Feedback from employee health professionals

4. According to Julie L. Gerberding, MD, MPH, director of the Centers for Disease Control and Prevention, why have some hospitals had a shortage of influenza vaccine despite record levels of vaccine production?
A. Vaccine has been stockpiled for future use.
B. Vaccine has been sent overseas.
C. There are uneven distribution patterns.
D. Hospitals made errors in ordering.

Answer Key: 1. D; 2. A; 3. C; 4. C.

CNE instructions

Nurses participate in this continuing education program by reading the issue, using the provided references for further research, and studying the questions at the end of the issue. Participants should select what they believe to be the correct answers, then refer to the list of correct answers to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material. After completing this semester's activity with the **June** issue, you must complete the evaluation form provided in that issue and return it in the reply envelope provided to receive a credit letter. ■

chair of the department of preventive medicine at Vanderbilt University in Nashville.

"Only half of the vaccine is distributed from the manufacturer directly to the end user," he notes. "The other half is distributed by biologics distributors. Each of them has their own customers and their own mechanisms. Some vaccine goes through two or three middlemen before it reaches the end user."

Because of that, "there will always be some medical providers who get vaccine before others," says Schaffner.

Hospitals ramp up for standard

This fall, supply problems created frustration and made it more difficult for hospitals to launch a flu vaccine campaign that they hoped would be their best ever. Hospitals are under increased pressure to improve vaccination rates.

The CDC first recommended influenza vaccination of all health care workers in 1981, but only about 40% receive the vaccine. About 36,000 deaths a year are attributed to complications from influenza.

This month, a new standard from the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) becomes effective, requiring hospitals to evaluate why some employees do not receive the annual vaccine and to take steps to improve participation.

The Joint Commission is not requiring the use of declination statements, but hospitals are using various methods to determine who's receiving the vaccine, who's not, and why they're not.

Yale-New Haven (CT) Hospital was forced to postpone its flu vaccine fair by about a week due to supply delays, says **Mark Russi**, MD, MPH, director of occupational health. At the vaccine fair, approximately 2,000 employees received their vaccine within 12 hours.

Then vaccination teams went to individual units to offer the vaccine. Nurse managers also received lists of their direct patient care providers who hadn't yet received vaccine so they could counsel them individually and offer them vaccine, says Russi, who is also associate professor of medicine and public health at the Yale University School of Medicine.

While Yale seeks to boost its vaccination rate overall, an emphasis is placed on vaccinating employees involved in direct patient care, he says.

"I'm glad there is more scrutiny of flu vaccine rates by CDC and JCAHO. If you look at national rates of vaccination, there still is a lot of room for improvement," he says. "I think the best way for medical centers to improve their rates is to use several different strategies over the course of a vaccination season."

Intranet helps track vaccinations

The Cleveland Clinic has a mandatory reporting program to track flu vaccination that has helped raise awareness — and vaccination rates. Employees log on to the hospital's intranet and indicate whether they received the vaccine, did not receive it because of contraindications, or declined the vaccine for other reasons.

Although there are no sanctions for failing to participate in the reporting, the hospital has a participation rate of more than 90%, says **Steve Gordon**, MD, hospital epidemiologist. Participation rates — but not individuals' names — are reported to division administrators.

The reporting program has been well received, says **Mary Bertin**, RN, BSN, CIC, infection control practitioner. From 2004 to 2005, the Cleveland Clinic's vaccination rate rose from 32% to 55%, she says.

"One of the nice things about the program is that if you select 'I decline vaccine,' then you get an automatic pop-up screen that gives you information about why we think you should take the vaccine," she says. "Although we can't guarantee that anybody reads it, it is at least one way to try to educate people."

The hospital has other education and awareness efforts. For example, the CEO shows his support by visibly receiving the vaccine himself. An employee newsletter contains weekly notices about flu vaccination.

The Cleveland Clinic considered making influenza immunization mandatory, but then

COMING IN FUTURE MONTHS

- Raising awareness of slips and falls
- Hospitals face respirator shortage
- Gaps persist in hepatitis B vaccination
- BLS surveys violence prevention programs
- OSHA to issue guidance on ethylene oxide

backed away from that plan, says Gordon. "From an ethics point of view, you've got to make sure you've exhausted other avenues [to raise rates]," he says.

Hospitals continue to combat flu vaccine myths, such as the belief that you can get influenza from the vaccine. Education should emphasize the importance of vaccination for patient and employee safety, says Schaffner.

"The single greatest motivator for influenza vaccination will be influenza. If it hits your city and it gets publicity, then it gets some notoriety and that provides some motivation for people to get vaccinated," he says.

But that should not be necessary to motivate health care workers, he says. "They should know by now the importance of getting vaccinated each and every year." ■

CNE objectives

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

- **identify** particular clinical, administrative, or regulatory issues related to the care of hospital employees;
- **describe** how those issues affect health care workers, hospitals, or the health care industry in general;
- **cite** practical solutions to problems associated with the issue, based on overall expert guidelines from the Centers for Disease Control and Prevention, the National Institute for Occupational Safety and Health, the U.S. Occupational Safety and Health Administration, or other authorities, or based on independent recommendations from clinicians at individual institutions. ■

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Those participants who earn nursing contact hours through this activity will note that the number of contact hours is decreasing to 15 annually. This change is due to the mandatory implementation of a 60-minute contact hour as dictated by the American Nurses Credentialing Center. Previously, a 50-minute contact hour was used. AHC Media LLC is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

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