



Hospital Employee Health®

December 2000 • Volume 19, Number 12 • Pages 133-144

IN THIS ISSUE

Lax attitude puts HCWs at bioterrorism risk

Too often, health care workers use protective equipment only when they know a patient is infectious. But national bioterrorism planning is giving employee health professionals a new and frightening reason to stress the use of standard precautions. An exercise in Denver showed that dozens of health care workers could become infected from a bioterrorism agent before it was identified. Part one of a two-part series Cover

Think it couldn't happen here? Yes it could!

Bioterrorism may seem like a very remote threat, particularly for hospitals located away from the urban centers of the country. But past events have shown that bioterrorism could strike anywhere 135

Congress passes landmark needle-safety legislation

Using safer needle devices and documenting all needlesticks on a sharps injury log became a national legal mandate with passage of the Needlestick Safety and Prevention Act in the waning hours of the Congressional session 137

CDC guarantees adequate supply of flu vaccine

Delays in production of flu vaccine wreaked havoc with immunization campaigns at some hospitals. But the Centers for Disease Control and Prevention in Atlanta assured hospitals and other providers that enough flu vaccine will be available — even if it's late. CDC set up a Web site to help those in need of vaccine identify supply. CDC also guaranteed production of an additional 9 million doses, to ensure that as many as 75 million doses will be available this year. 138

(Continued on next page)

Lack of preparation for bioterrorism puts health workers at risk

Experts urge education, better use of precautions

May 19, 2000: Patrons are watching a performance in the Denver Performing Arts Center while, silently, pneumonic plague is unleashed through air conditioning vents. The first symptoms are benign: cough, fever, achiness. Yet within days, symptoms worsen as some victims begin coughing up blood. Eventually, thousands of people become ill and flock to area hospitals. This act of bioterrorism leads to secondary infections in dozens of health care workers who are treating the patients. Delays in recognition of the infectious threat leads to deaths.

This scenario, created as an unannounced exercise to test readiness for a bioterrorism threat, revealed serious weaknesses in hospitals' ability to respond to that kind of crisis. Hospitals quickly became overwhelmed with patients and, after multiple shifts without rest, hospital staff became fatigued, stressed, and fearful.

While national bioterrorism experts dissect what they learned from the Denver exercise, they have a simple message for employee health professionals: Do more of what you do best.

Staff education and awareness can make a difference in how effectively hospitals respond to bioterrorism or naturally emerging infectious diseases, experts say. Employees who are careful about complying with standard precautions, including giving masks to patients with respiratory symptoms and wearing masks themselves, will be better protected from new pathogens.

NOW AVAILABLE ON-LINE!
www.ahcpub.com/online.html
For more information, contact (800) 688-2421.

'Human factors' shape patient, worker safety

Lower staffing and poor morale are linked to significantly higher rates of needlestick injuries, researchers from the University of Pennsylvania reported at a conference on 'Enhancing Working Conditions and Patient Safety.' The relationship between patient and employee safety provides an impetus to improve working conditions in hospitals, participants said. 139

Putting on the 'blitz' raises safety awareness

A focused exposure awareness campaign can lead to safer work practices, says Linda Good, RN, MN, COHN-S, employee occupational health coordinator, who spoke at the recent annual conference of the Association of Occupational Health Professionals in Healthcare in Albuquerque, NM 140

Employee health reaches the bargaining table

Nurses on the picket line focus on patient safety in their complaints about mandatory overtime and staffing. But employee health is growing as an issue in contract negotiations, as unions take on latex allergy, needle safety, ergonomics, fatigue, and stress. 141

Rapid HIV test pulled from market temporarily

Production of the only rapid HIV test currently licensed for the U.S. market has been suspended while the manufacturer, Abbott Diagnostics of Abbott Park, IL, struggles to resolve manufacturing problems 142

Also in This Issue

2000 *Hospital Employee Health* index of stories Insert

Coming next month: Dealing with the fear

If a bioterrorism event strikes, you can expect that many of your employees will stay home rather than risk infection. How do you cope with fear of rare and deadly infectious diseases? Should you ever give prophylaxis just to lessen those fears? Look for these answers and more next month in the conclusion of our bioterrorism series.

COMING IN FUTURE ISSUES

- The 'safe room of the future': What new devices or techniques will protect workers?
- Giving employees a voice in identifying hazards and fixing them
- How staffing affects both patient and worker safety
- Are you preventing accidents before they happen?
- Boosting skills may help reduce needlestick injuries

"We've led health care workers down a path so they're waiting to know which patients are infectious and [when they need] to do something special," says **Lynn Steele**, MS, CIC, epidemiologist with the Hospital Infections Program at the Centers for Disease Control and Prevention in Atlanta. Instead, employees should routinely use protective equipment to protect against bodily fluids.

"Doing the right thing as consistently as possible is the key," concurs **Michael Bell**, MD, bioepidemiologist for the Hospital Infections Program and lead CDC author of a guidance paper on bioterrorism. **(For more information, see editor's note at the end of this article.)**

The agents considered most likely to be used in bioterrorism at first don't present symptoms that seem alarming. Victims of smallpox won't feel sick at all for a few days or more than a week while the virus incubates. They'll first get a rash and fever, but when smallpox symptoms worsen, the disease causes disfigurement, pain, and, for many, death.

Pneumonic plague, a pulmonary version of the ancient bacterial disease, begins with symptoms that seem like the common cold. But "by the time some of the patients present with severe symptoms, even antibiotics will not save their lives," says **Stephen Cantrill**, MD, associate director of emergency medicine at Denver Health Medical Center and a participant in the exercise. "It's by and large a matter of time before they die."

While some possible bioterrorism agents, such as anthrax, don't involve person-to-person transmission, smallpox and plague could spread through secondary infections. **(For information on the most likely bioterrorism agents, see box, p. 136.)**

In Denver, Cantrill and his colleagues considered health care workers at risk for infection from plague if they had contact within two feet of the patient and weren't using protective gear. The numbers reached into the dozens before the bioterrorism event would have been detected. "This represents a real dilemma, quite honestly," says Cantrill. "We can't all dress up like spacemen when someone has the symptoms of a cold."

But using masks and goggles after the outbreak has been identified leaves many unprotected. "Once the institution realizes it's dealing with an epidemic of a significant disease, then everyone is going to follow appropriate precautions," says Cantrill. "Are you closing the barn door after the horses escape? How much damage

'It can't happen here': You better think again

If you live and work far from one of the nation's financial or governmental centers, a bioterrorism attack may seem about as likely as an asteroid strike. Not zero chance, but close to it.

But if you think you don't have to worry about bioterrorism because of your location, think again. After all, notes **Michael Bell**, MD, lead author of a guidance paper on bioterrorism, "I wouldn't have expected Oklahoma City to be targeted for bombing. . . . It's impossible to say any particular site is going to be absolutely safe." Bell is a bioepidemiologist for the Hospital Infections Program with the Centers for Disease Control and Prevention in Atlanta.

Past events already have proven that point. In 1984, a religious cult in the rural community of The Dalles, OR, intentionally contaminated restaurant salad bars with *S. Typhimurium*, sparking a community-wide outbreak of salmonellosis that afflicted more than 750 people. The county previously had an average of five salmonellosis cases a year. When a vial of the bacteria was found in a laboratory on the cult's compound, cult members admitted putting the organism on the salad bars and in the city's water supply tank. They reportedly hoped to influence local elections by sickening potential voters.¹

More recently, the group Aum Shinrykyo released nerve gas in the Tokyo subway system. Authorities later discovered that the group had experimented with botulism and anthrax.

Planning for bioterrorism can be integrated into a broader effort to detect emerging infectious diseases, which also can evolve suddenly.

"We must always be prepared for the unexpected, whether it be a naturally occurring influenza pandemic, multiple antibiotic-resistant infections, or the

deliberate release of anthrax by a terrorist," said **James M. Hughes**, MD, director of the National Center for Infectious Diseases at the Centers for Disease Control and Prevention in Atlanta, as he testified before a U.S. Senate subcommittee.²

In fact, it may be difficult to tell in the first days of an outbreak whether it was intentional or naturally occurring. Before Legionnaire's disease was identified in a 1976 outbreak, some suspected that the veterans in Philadelphia had been intentionally targeted with a pneumonia-like disease. Likewise, before rodent-borne hantavirus was identified in the Southwest in 1993, rumors spread that the Navajo tribe had been targeted with a biological agent.

Trying to define the probability of a bioterrorism act is impossible because they are so unpredictable, says Bell. "We can lull ourselves into a false sense of security, but I don't think we should," he says. "Even though we seem to think it's a small probability, we don't know what that means. All we can say is it's a nonzero probability. The probability does exist. Then we have to decide if it's important enough to prepare for."

Nationally, bioterrorism planning includes the Office of Emergency Preparedness, the National Security Council, the Federal Bureau of Investigation, the Department of Defense, local and state health departments, and other federal agencies.

Different communities will set their own priorities for preparedness, says Bell. "Each state is taking a tailored approach to what it needs to do," he says.

References

1. McDade JE, Franz D. Bioterrorism as a public health threat. *Emerging Infectious Diseases* 1998; July-Sept 4(3).
2. Hughes JM. Testimony before the Subcommittee on Labor, Health and Human Services, and Education of the Committee on Appropriations, U.S. Senate. June 2, 1998. ■

was done before you realized that?"

The Denver exercise raises more questions than answers. But Cantrill and others say the real possibility of bioterrorism, or of an emerging infectious disease, provides a basis for employee awareness and greater vigilance toward standard precautions. (See related article, above.)

Research shows that physicians, nurses, and other hospital staff follow appropriate hand-washing procedures in only 25% to 75% of all patient encounters.^{1,2} One study found that only about half of operating room personnel wore protective eyewear.³

And while wearing gloves has become routine, the use of masks remains low. "We hope to change

the culture, so it becomes the norm to put on a mask and eye protection until you evaluate that the patient is not coughing or is not going to have any potential to transmit body fluids, instead of waiting for that label to know this is something extra you have to do," says Steele.

Employee health professionals also have a role in the broader preparations that should occur hospitalwide. The Denver exercise pointed to the importance of communication, particularly as a part of detection of emerging diseases.

While infection control staff take the lead in surveillance and reporting to public health authorities, employee health professionals would be an important link in the education of health

Symptoms of Possible Bioterrorism Agents

ANTHRAX

Symptoms usually appear within seven days of contact and vary depending on how the disease was contracted. Cutaneous infections occur when the bacterium enters a cut or abrasion on the skin. Skin infection begins as a raised itchy bump that resembles an insect bite but within one to two days develops into a vesicle and then a painless ulcer, usually 1 cm to 3 cm in diameter, with a characteristic black necrotic (dying) area in the center. Lymph glands in the adjacent area may swell. About 20% of untreated cases of cutaneous anthrax will result in death. Deaths are rare with appropriate antimicrobial therapy.

— **Inhalation:** Initial symptoms may resemble a common cold. After several days, the symptoms may progress to severe breathing problems and shock. Inhalation anthrax usually results in death in one to two days after onset of the acute symptoms.

— **Intestinal:** The intestinal disease form of anthrax may follow the consumption of contaminated meat and is characterized by an acute inflammation of the intestinal tract. Initial signs of nausea, loss of appetite, vomiting, and fever are followed by abdominal pain, vomiting of blood, and severe diarrhea. Intestinal anthrax results in death in 25% to 60% of cases.

BOTULISM

Classic symptoms include double vision, blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth, and muscle weakness. Infants with botulism appear lethargic, feed poorly, are constipated, and have a weak cry and poor muscle tone. The symptoms are related to muscle

paralysis caused by the bacterial toxin. If untreated, these symptoms may progress to cause paralysis of the arms, legs, trunk, and respiratory muscles. In foodborne botulism, symptoms generally begin 18 to 36 hours after eating contaminated food, but they can occur as early as six hours or as late as 10 days.

PLAGUE

Symptoms include a very swollen and tender lymph gland, fever, chills, headache, and extreme exhaustion. The pneumonic form involves a severe respiratory illness including high fever, chills, cough, breathing difficulty, and possibly bloody sputum. Naturally occurring plague is linked to rodents, rabbits, and fleas. If plague patients are not given specific antibiotic therapy, the disease can progress rapidly to death. About 14% (one in seven) of all plague cases in the United States are fatal.

SMALLPOX

Initially, symptoms resemble other viral illnesses, such as influenza, with fever and myalgia for two to four days. Skin lesions appear and quickly progress into a disfiguring pustular rash. The rash is most prominent on the face and extremities and scabs over in one to two weeks. Smallpox can be transmitted from respiratory droplets or from contact with skin lesions or secretions, with an average incubation period of 12 days. It is highly contagious and can lead to death in more than 30% of victims.

Source: Centers for Disease Control and Prevention, Atlanta.

care workers. In the case of an outbreak, many employees would turn to employee health staff with concerns about safety, prophylaxis, and possibly vaccination.

In the wake of the bioterrorism exercise, the Medical Center of Aurora (CO) is currently developing protocols to enhance the early recognition of new disease clusters. While the test case of pneumonic plague presented a difficult scenario, it pointed to the importance of staff education and staff awareness when a cluster of patients presents with the same symptoms, says **Sandy Hawkins**, RN, MS, CIC, the hospital's infection control coordinator.

She echoed the importance of communication, particularly within the emergency department. "We have a very large emergency department. Physically, there are five different areas, and, at any given time, we have six physicians on duty.

The staff soon discovered that communication within the department for updates was a priority.

"Team members need to meet every 20 minutes for updates, with an open line to the command center," she says. "That way team members have the most current information about patients, causative agent, treatment recommendations, and other matters."

Rapid dissemination of information can diffuse rumors and fears, notes **Tara O'Toole**, MD, MPH, deputy director of the Center for Biodefense Studies at Johns Hopkins University in Baltimore. "It is very important that hospital personnel of all stripes are aware of the possibility of a bioterrorism attack and have enough factual information about what they should do, how they could be protected. Should an attack occur, someone needs to be able to get information out to everyone from professional staff to support workers. [Hospitals need to]

communicate very rapidly to people whether they are at risk and how.”

Hospitals also may develop systems that could be adapted to address a bioterrorism emergency, notes O’Toole. For example, a computer system used to monitor medical errors could be designed to adapt to outbreak response. Collaborative efforts among hospitals would enhance the community’s emergency readiness.

“The possible consequences of a bioterrorism attack are so dire that I think there are solemn responsibilities that the hospital community and the medical community more generally have to accept in preparing for such an event,” she says. “There’s an awful lot we can do to prepare that would limit suffering and death. It would be too late once an attack occurs to make the arrangements that would mitigate the situation.”

(Editor’s note: The CDC and the Association for Professionals in Infection Control and Epidemiology

have developed a “Bioterrorism Readiness Plan: A Template for Healthcare Facilities,” which is available on the CDC’s Web site at www.cdc.gov/ncidod/hip/Bio/bio.htm.)

References

1. Pittet D, Mourouga P, Perneger TV. Compliance with handwashing in a teaching hospital. *Ann Intern Med* 1999; 130:126-30.
2. Simon A, Hugonnet S, Perneger T, et al. Doctor, why do you wash your hands so little? Presented at the Fourth Decennial International Conference on Nosocomial and Healthcare-Associated Infections. Atlanta; March 2000.
3. Kim L, Freeman B, Jeffe D, et al. Educational intervention improves compliance with universal precautions in the operating room for two years after training. Presented at the 10th annual meeting of the Society for Healthcare Epidemiology of America, during the Fourth Decennial International Conference on Nosocomial and Healthcare-Associated Infections. Atlanta; March 2000. ■

Congress passes landmark needle-safety legislation

Hospitals must use safer devices, keep log

Using safer needle devices and documenting all needlesticks on a sharps injury log became a national legal mandate with passage in late October of the Needlestick Safety and Prevention Act in the waning hours of the congressional session.

Needle-safety experts and union representatives predicted that the new law would prevent thousands of needlesticks. When used properly, safety devices can reduce needlestick injuries by 80%.

“This landmark legislation without a doubt will save many lives and improve the quality of health care,” said **Janine Jagger**, PhD, MPH, director of the International Health Care Worker Safety Center at the University of Virginia in Charlottesville, who was among the first to call for the use of needle safety devices.

The bill, approved unanimously by both the House and Senate, was one of the last actions taken before Congress adjourned in late October. President Clinton was expected to sign it into law in November.

The Needlestick Safety and Prevention Act amends the bloodborne pathogen standard of the U.S. Occupational Safety and Health Administration (OSHA), bypassing the lengthy process of rule

making. In 1999, OSHA already had issued a compliance directive directing hospitals and other health care facilities to use “engineered controls” to reduce needlesticks.

The revised bloodborne pathogens standard, as provided by the law, will become effective 90 days after it is published in the *Federal Register*, which should occur in about six months.

The Needlestick Safety and Prevention Act requires employers to take these measures:

- ✓ Use devices designed with safety features and maintain an up-to-date exposure control plan.
- ✓ Include nonmanagerial workers who are involved in direct patient care in the evaluation and selection of devices.
- ✓ Maintain a sharps injury log with information on the type and brand of device involved in the incident, the work area where the exposure occurred, and an explanation of the incident.

“This was a very dramatic bipartisan effort,” says **Madeleine Golde**, senior legislative advocate for the Service Employees International Union in Washington, DC. “This bill could never have passed without that.”

The law may stem a wave of state legislation on needlestick prevention, which began with landmark legislation in California. Some 16 states had passed some type of needle safety law. The national legislation was endorsed by the American Hospital Association.

Yet despite widespread support for the needle safety bill and intense lobbying by unions representing health care workers, the bill was stalled

for a time by political machinations.

When the bill passed the House and went to the Senate, Sen. Jim Bunning (R-KY) put a procedural “hold” on it. MedPro, based in Lexington, KY, a manufacturer of sharps safety equipment, was pressing for language in the bill that would incorporate needle disposal devices. Bunning eventually removed that hold.

“They completely misunderstand the difference between a safer device and a disposal device,” lamented **Mary Foley**, RN, MS, president of the American Nurses Association in Washington, DC. ■

Amid flu vaccine delays, CDC offers to boost supply

Web site links available doses with those in need

As employee health professionals scrambled to cope with flu vaccine delays, the Centers for Disease Control and Prevention created a special Web site to link those needing more vaccine with sources of extra supply.

The site, which can be accessed through www.cdc.gov/nip, was designed not only to provide information on manufacturers and distributors but allow unused vaccine to be redirected to hospitals that need it.

CDC also has guaranteed the production of up to 9 million additional doses, which are to be available in December, to ensure that there will be no overall shortfall. Last year, 74 million of the 77 million doses produced were distributed. This year, CDC anticipates a total of 75 million doses.

However, the timing of those doses has wreaked havoc with hospitals’ campaigns to immunize health care workers and high-risk patients. Some hospitals received their usual flu vaccine orders nearly on time. Others were told that most of their shipment would arrive in November and December and that they should expect 10% to 15% less than they ordered.

“We were really trying to step up efforts this year [to immunize health care workers] and now it’s going to be much harder,” says **James Garb**, MD, director of occupational health and safety at Baystate Health System in Springfield, MA, sharing the concerns of many in employee health. Garb expected to receive just 16% of his order in October, another 58% in November,

and the remaining 26% in December.

Delays in production of the flu vaccine emerged earlier this year when growth of the A(H3N2) vaccine component proved more difficult than expected. Two manufacturers also had quality control issues to resolve with the Food and Drug Administration (FDA).

As a result, manufacturers had somewhat different production problems. Aventis Pasteur of Swiftwater, PA, began shipping vaccine in September and expected to continue shipments through the end of November, about a month behind schedule. Wyeth-Ayerst Laboratories in St. Davids, PA, expected to ship most of its 24 million doses in November and December.

Overall, the FDA estimated that 76% of the flu vaccine would be shipped by the end of November.

The Advisory Committee on Immunization Practices issued recommendations in October that called for giving priority to the highest risk patients and health care workers who cared for them. The expert panel also stressed that even immunizations given as late as December or January would likely prevent spread of influenza.

“In a review of the past 18 influenza seasons, peak activity occurred in January to March during 14 years,” reported **Walter Orenstein**, director of the National Immunization Practices and assistant surgeon general. Allowing for two weeks between vaccination and full immunity, “vaccination even in December will be expected to have impact in most years.”

Campaigns can continue into next year

In fact, vaccination campaigns can continue into the next year, according to Orenstein. “Influenza peaked in February and March in 10 of 18 years. Even vaccinations in January can prevent disease morbidity and mortality in most years.”

Influenza experts gave the greatest priority for immunization to high-risk patients — those with medical conditions that place them at risk for complications due to influenza. But they made it clear that immunizing health care workers who care for those patients is an equally important task.

If there’s a shortfall at a hospital, “the first advice would be for these organizations to get additional vaccine as much as possible,” says **Keiji Fukuda**, MD, MPH, chief of CDC’s influenza branch. “It really shouldn’t be an either/or situation. The target is to protect high-risk people. Vaccinating health care workers is a part of that strategy.”

Influenza experts were uncertain what impact the delay would have on efforts to reach higher levels of immunization of health care workers. The 1997 National Health Interview Surveys found that 34% of health care workers received the influenza vaccine. Vaccination levels of 80% or above provide “herd immunity” in which the virus is unlikely to spread.

Lanier Park Hospital, a small hospital in Gainesville, GA, typically immunizes more than 70% of its staff involved in direct patient care. But this year, the hospital didn’t expect to receive any vaccine until late November, says **Edward I. Galaid**, MD, MPH, medical director of Lanier Park Occupational Health.

“Once the word started coming down that the vaccine was going to be delayed, the projections of when we were going to get our vaccine were later and later,” he says.

While the hospital was prepared to administer vaccine as quickly as possible once it became available, Galaid also was looking into the use of antivirals to shorten the course of influenza for those health care workers who become sick.

“I think it’s a prudent strategy to consider, not knowing when the peak of the flu season is going to be this year,” he says. “I know last year was particularly challenging in terms of staffing [during the influenza season]. The hospital is full, your census is up, then you have people who are sick. It’s a one-two punch.”

As a part of that strategy, “I think we’re going to have to increase employee awareness of what the symptoms are of flu,” Galaid says.

Ironically, the delay and fears of a shortage of flu vaccine may have given the immunization efforts an added boost of publicity. Some members of the ACIP panel noted that it’s human nature to want something that is in high demand.

Last year, Memorial Sloan Kettering Cancer Center in New York City used “flu deputies” in the hospital units to administer flu vaccines and raised immunization rates to about 40%. As the fall shipments of vaccine were delayed, **Janet Eagan**, RN, MPH, CIC, the infection control manager, made contingency plans to immunize staff in the highest risk units first. Meanwhile, hospital staff began asking when the vaccine would arrive. (She expected her order in early November.)

“People stop me in the hall now asking, ‘When are you going to give it out?’ We’re going to try to use [the publicity] to our advantage,” she says. “There’s a lot of press about it. A lot of people are concerned. I’m really hoping more people will be

paying attention to [flu immunization] and will be ready to go when it gets here.”

Eagan says she is glad she has an effective mechanism to immunize health care workers quickly. “I have a system in place, and everyone knows what to do. I will give them their flu kits — everything except the vaccine.”

Implementing the “flu deputies” program last year puts her in a strong position, Eagan says. “It would be harder to start that program now without the vaccine here.” ■

Staffing, work climate impact patient safety

Needlesticks more likely with reduced staffing

Nurses who work in hospitals with lower staffing and poor morale are more likely to suffer needlestick injuries, according to research that was a highlight at a special conference on working conditions and patient safety.

“We found that the worst staffed nursing units in 20 hospitals and the nursing units with the worst working climate [as measured through surveys] had two to three times increased risk of being stuck by a needle in a 30-day period,” says **Sean Clarke**, RN, PhD, CRNP, CS. Clarke, a postdoctoral fellow at the Center for Health Outcomes and Policy Research at the University of Pennsylvania School of Nursing in Philadelphia, used 1991 data.

The center, led by researcher **Linda Aiken**, RN, PhD, conducted three different studies in 1991, 1998, and 1999, encompassing data from five countries. The results provided evidence for the concerns raised at the October conference, “Enhancing Working Conditions and Patient Safety: Best Practices.”

The conference was sponsored by five federal agencies: the National Institute for Occupational Safety and Health, the Agency for Healthcare Research and Quality, the Occupational Safety and Health Administration (OSHA), the Veterans Health Administration, and the National Institute for Communicable Diseases at the Centers for Disease Control and Prevention.

Patient safety and employee health are interconnected, several speakers contended.

“[The conference] reflects a vision and a wisdom that is emerging in parallel universes that they can’t be parallel, they have to be intertwined,” says

Mary Foley, RN, MS, president of the American Nurses Association and one of the speakers at the conference. “The worker element was missing in a lot of the studies on the [patient] safety issues, on patient errors. It failed to recognize the human factors,” she tells *Hospital Employee Health*.

In fact, researchers at the University of Pennsylvania found that the “human factors” could outweigh other measures designed to reduce injury. Preliminary data show that patient indicators such as medication errors, patient falls, and low satisfaction are associated with health care worker injuries and burnout. Hospitals where nurses perceived they had a good working climate and adequate staffing also had better patient outcomes, he says. “What’s good for workers is good for patients,” Clarke tells *HEH*.

“If we want to make hospitals a safer place we need to work on good policies and procedures, but we also need to look at how many people we’re putting to work and how we’re supporting them,” he says.

Interestingly, although the countries studied have different types of medical systems, they all experienced similar issues, Clarke says. The center’s latest study included hospitals in the United States, Canada, Germany, Scotland, and England.

“So far, everything we see suggests that those countries are more alike than different,” he says. “Nurses are seeing the same situations in terms of quality in their hospitals. Nurses are talking about the same levels of problems as here in the U.S.”

In the conclusion of his presentation, Clarke noted, “Remedying problems with understaffing and poor working climates could be one of the most important steps in building a safer health care system.”

This “Best Practices” meeting was designed as an upbeat follow-up to a conference last year that linked patient safety and working conditions. Speakers discussed programs that have decreased back injuries, needlesticks, nosocomial infections, and other hazards.

James P. Bagian, MD, PE, director of the National Center for Patient Safety at the Veterans Health Administration, spoke of that agency’s pace-setting work to redesign care processes to be both patient-friendly and worker-friendly.

“This [link between patient and worker safety] has momentum, and we want to keep that momentum going,” says **Gregg Meyer**, MD, director of the Center for Quality Measurement and Improvement at the Agency for Healthcare Research and Quality in Washington, DC.

While Foley and others called for more research to establish the link between staffing and other working conditions and patient safety, Meyer noted that many hospitals already have success stories to share.

“We want to move those [examples] into more generalized practice, while at the same time building more of a knowledge base,” he says.

Participants even heard from the chairman of the board of Alcoa about how worker safety can improve productivity and performance — thus creating a better business environment. That “human factors” perspective is just emerging in health care, says **Elise Handelman**, MEd, RN, COHN-S, director of OSHA’s office of occupational health nursing.

“We’ve focused on patient care but haven’t looked at the whole work environment,” she says. “There are situations where we can improve the situation for both [workers and patients].”

[Editor’s note: Hospital Employee Health will highlight some of the best practices in upcoming issues. More information on the conference can be found on the Web site of the Quality Interagency Coordination Task Force at www.quic.gov.]

Reference

1. Clarke SP, Aiken LH, Sloane DM, et al. Staffing and professional practice environments in hospitals as keys to nurse and patient safety. Presented at Enhancing Working Conditions and Patient Safety: Best Practices. Pittsburgh; October 2000. ■

Putting on the ‘blitz’ raises safety awareness

Campaign includes catchy posters, measurement

“**S**plash happens.” That stark fact and other compelling messages on safety posters helped Scripps Memorial Hospital in La Jolla, CA, reduce splash and needlestick exposures by 70%. A focused awareness campaign can lead to safer work practices, says **Linda Good**, RN, MN, COHN-S, employee occupational health coordinator, who spoke at the recent annual conference of the Association of Occupational Health Professionals in Healthcare in Albuquerque, NM.

The October conference attracted about 225

employee health professionals who heard updates on Occupational Safety and Health Administration (OSHA) activities and the latest trends in disability management, accident investigation, and blood-borne pathogen protection. This year, the conference highlighted “Best Practices,” which gave Good an opportunity to share the “blitz strategy” she used in the exposure-prevention campaign. The campaign was recognized by her health system with a “Values in Action: Quality” award.

“Each week we had a different series of posters put up at all six facilities simultaneously,” says Good. “No matter where you went for a meeting, everywhere you’d look you’d see these posters. The idea was that the repetition in itself would be an eye-catching element.”

That just wasn’t a matter of creating some posters and slapping them on the walls. Good and her colleagues took a methodical approach both to the message and the outcomes.

They began by reviewing employee injury logs to look for problem areas. “We were trying to pick up on things in which we could intervene,” she says.

The Employee Health Consortium, made up of employee health professionals who work in the Scripps hospitals, home health agency, and skilled nursing facility, decided on four basic topics related to bloodborne exposures: sharps container injuries, splashes to mucous membranes, hidden sharps on instrument trays, and a general resistance to change [to accommodate safer devices and practices].

From the outset, the committee members agreed to collect before-and-after data on exposures. “One of our high priorities was to make this measurable,” says Good.

In fact, conducting a campaign and measuring its effects is one way to show the impact of an employee health department, says Good.

“We need to demonstrate our value to the administrators and decision makers, so they aren’t tempted to do away with us [in a cost-cutting crunch],” she says. “We felt that it would be much more impressive to say at our facility we had a 25% decrease in needlesticks following the campaign, rather than saying we felt this was successful.”

As a baseline, Good used exposure data from the quarter preceding the campaign. As a follow-up, she looked at exposures the quarter after the campaign.

Good drew the messages for the campaign from interviews with employees who had exposure

incidents. “We chose things we thought would impact them. We tried to pick things that were vitally important to them.”

For example, one poster uses speech bubbles to reveal why nurses don’t use the needleless system: “It’s a hassle. I’m in a hurry. I’m only injecting the IV line.”

Then the poster states: “You haven’t seen hassle ’til you spend a year getting HIV tested. Think safety — Use the needleless system every time.”

“Maybe if we poked fun at it a little bit or repeated back to the people some of the excuses they were giving to us, they could [question] if they really were legitimate excuses,” Good says. Overall, the four-week campaign led to a reduction in needlesticks at all three participating hospitals.

Many of the posters remained up at the facilities, although over time, they lose their impact, notes Good. She says she’s ready for another awareness campaign. This one is about the importance of looking out for the welfare of co-workers. She calls it, “Be a Safety Angel.”

“My pet dislike is [to do] accident follow-up,” she says. “There’s nothing more sad than to follow up on injuries after they’ve happened. Anything I can prevent from happening is great; that’s my highest priority.” ■

Employee health debated at union bargaining table

From fatigue to latex allergy, issues strike chord

Employee health issues have moved to the forefront as a bargaining issue as unions raise concerns about working conditions and demand action on latex allergy, needlestick safety, ergonomics, and other issues.

“Every year, we’re negotiating more health and safety language on a broad range of health and safety issues that health care workers face,” says **Bill Borwegan**, MPH, occupational health and safety director of the Service Employees International Union (SEIU) in Washington, DC. “It’s such a pertinent issue, and the government really has not accepted its responsibilities [to protect workers] and neither has management.”

As nurses walked the picket line at Washington (DC) Hospital Center in October, some held signs urging action on safety issues.

Efforts to limit mandatory overtime were a major focus of the strike, but negotiations also touched on latex allergy and the labor-management safety committees.

The American Nurses Association and its affiliate, the District of Columbia Nurses Association, both in Washington, DC, asserted that mandatory overtime caused stress and fatigue that could lead to medical errors as well as employee injury. Four other strikes this year have involved the issue of mandatory overtime.

Washington Hospital Center contended that the union exaggerated the problem of mandatory overtime. Areas most likely to face mandatory overtime include the operating room and trauma unit. "The reality is that 90% of our nursing units only have to work involuntary overtime a couple of times a year," says **Lisa Wyatt**, MSM, vice president of public affairs for Washington Hospital Center. "We have made extremely reasonable proposals on capping the mandatory overtime for the nursing units that are hardest hit."

"Realistically, if this only happened once or twice a year, it would not be an issue," counters **Karen Skinner**, RN, MSN, RNC, spokeswoman for the District of Columbia Nurses Association. "They would not be out of their jobs for three weeks if this was an occasional issue. It happens routinely, and it's a major concern.

"It doesn't happen on all the units, but it does happen on many of the units," she says. "It's enough of a problem that they're saying we have to address this before we can go back to work."

The relationship between stress, fatigue, and injury is gaining new attention from federal agencies and academic researchers. A conference sponsored by several agencies in October focused on the link between patient safety and working conditions. (See related article, p. 139.)

"Finally, the health and safety of health care workers — of caring for people who care for others — is getting the attention it needs and deserves," says **Susan Wilburn**, RN, MPH, senior specialist for occupation safety and health with the American Nurses Association.

While needlestick and back injuries attract more publicity in the media, they also are touchstones for union organizers, says Borwegan. "It's low-hanging fruit for a union that's looking to help improve the conditions of unorganized workers," he says.

Unions also have successfully included health and safety language in contracts.

At San Francisco General Hospital, the SEIU

negotiated a contract provision that requires purchasing decisions on safer needle devices to be made by a joint labor-management committee. Last year, ANA negotiations at Children's National Medical Center in Washington, DC, included the replacement of latex products with nonlatex alternatives.

The SEIU negotiated language in a contract with Jackson Memorial Hospital in Miami that states, in part, "The Employer will continue to comply with applicable federal, state, and county laws and regulations pertaining to occupational safety and health. To this end, any unsafe conditions reported by nurses will receive priority corrective action by management."

Unions also have demanded the involvement of frontline health care workers in safety issues, such as the prevention of needlestick injuries.

"There's a great deal more awareness in the problem [of health care worker injury] as well as the fact that there are many solutions," says Wilburn. "Those solutions will be more specific and effective if nurses are involved in them." ■

Rapid HIV test pulled from market temporarily

FDA recommends alternatives for fast results

Production of the only rapid HIV test currently licensed for the U.S. market has been suspended while the manufacturer, Abbott Diagnostics of Abbott Park, IL, struggles to resolve manufacturing problems.

In an Oct. 18 letter to customers, Abbott stated that the Abbott/Murex Single Use Diagnostic System (SUDS) HIV-1 test failed "to meet certain panel and negative control specifications."

"As part of this investigation, all product components are being evaluated as a potential cause for this problem," vice president **Gene Cartwright**, PhD, stated in the letter. While the company gave no time line for restarting production of the rapid HIV test, it could be as soon as 30 days, he added.

Hospitals may continue to safely use their current supply of the SUDS test, says Food and Drug Administration (FDA) spokeswoman **Lanessa Banks**.

The sudden suspension of production highlighted the importance of a swift and well-informed response to needlestick exposures.

The SUDS test provided an initial result on the HIV status of source patients within 10 minutes. However, some concerns had surfaced about the accuracy of the rapid test.

At PEpline, a national post-exposure hotline for clinicians and health care workers, recommendations for PEP are based on risk factors and an assessment of the exposure, says **Ronald H. Goldschmidt, MD**, professor of family and community medicine at the University of California-San Francisco and co-director of PEpline. PEP can be discontinued within a few days if tests show the patient is HIV negative, he says.

The suspension of the rapid test “reemphasizes how important it is to have HIV tests done accurately and in the context of proper counseling,” says Goldschmidt. “Falsely positive tests are phenomenally traumatic and create major medical problems [from PEP side effects]. Falsely negative tests can leave people without proper care and lead to inadvertent infection of other persons.”

As an interim measure, the FDA recommended using enzyme-linked immunoassays (EIA). “Typically, samples are tested in batches so that results may not be available for several days. However, if health care providers arrange for the EIA tests to be performed on samples as needed, results could be available within 90 to 160 minutes,” the FDA reported.

The agency also recommended testing three batches with the EIA at one time to avoid the delay of retesting after a needlestick. “Repeatedly reactive samples would be those found reactive in at least two of the three replicate tests.”

The Sano Chemia (originally Waldheim) Fluorognost HIV-1 Indirect Immunofluorescence Assay could be used as an alternative to the EIA and, with proper equipment and a well-trained technician, could be available within 100 minutes, the FDA stated.

Regardless of the screening test used, it should be confirmed by a supplemental test, the FDA said. “The long-range solution to this problem will include the availability of multiple rapid HIV tests. FDA continues to encourage the development of rapid HIV tests and has recently taken action to facilitate approval of rapid HIV tests.”

[Editor’s note: For more information on the SUDS test suspension and interim measures, contact the FDA’s Center for Biologics Evaluation and Research’s Consumer Affairs Branch, Office of Communication, Training and Manufacturer

Assistance at (800) 835-4709 or (301) 827-1800. A list of licensed HIV tests is available at www.fda.gov/cber/products/testkits.htm.] ■

NEWS BRIEF

Eye wash recalled as unsterile, possible hazard

H. L. Bouton of Buzzards Bay, MA, has issued a voluntary recall of eye wash products, saying they may be unsterile and could pose a “serious health hazard.”

Hospital Employee Health® (ISSN 0744-6470) is published monthly by American Health Consultants®, 3525 Piedmont Road, Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodical 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.-6:00 p.m. Monday-Thursday, 8:30 a.m.-4:30 p.m. Friday EST. E-mail: customerservice@ahcpub.com. World Wide Web: www.ahcpub.com.

Subscription rates: U.S.A., one year (12 issues), \$399. Outside U.S., add \$30 per year, total prepaid in U.S. funds. Two to nine additional copies, \$319 per year; 10 to 20 additional copies, \$239 per year. For more than 20 copies, contact customer service for special handling. 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 \$67 each. (GST registration number R128870672.)

Photocopying: No part of this newsletter may be reproduced in any form or incorporated into any information retrieval system without the written permission of the copyright owner. For reprint permission, please contact American Health Consultants®, Address: P.O. Box 740056, Atlanta, GA 30374. Telephone: (800) 688-2421.

This continuing education offering is sponsored by American Health Consultants®, which is accredited as a provider of continuing education in nursing by the American Nurses Credentialing Center’s Commission on Accreditation. Provider approved by the California Board of Registered Nursing, provider number CEP 10864.

Opinions expressed are not necessarily those of this publication. Mention of products or services does not constitute endorsement. Clinical, legal, tax, and other comments are offered for general guidance only; professional counsel should be sought for specific situations.

Editor: **Michele Marill**, (404) 636-6021, (marill@mindspring.com). Vice President/Group Publisher: **Brenda Mooney**, (404) 262-5403,

(brenda.mooney@ahcpub.com). Editorial Group Head: **Coles McKagen**, (404) 262-5420,

(coles.mckagen@ahcpub.com). Production Editor: **Ann Duncan**.

Copyright © 2000 by American Health Consultants®. Hospital Employee Health® is a trademark of American Health Consultants®. The trademark Hospital Employee Health® is used herein under license. All rights reserved.

Editorial Questions

For questions or comments call **Michele Marill** at (404) 636-6021.

AMERICAN HEALTH CONSULTANTS
THOMSON HEALTHCARE

The recall includes eyewash, emergency eye/face/body wash, eyewash concentrate and normal saline marketed under the Lavoptik, Zee Medical, and Rapid Clear labels. The eyewash and emergency eye wash/face/body/wash are in 6 oz., 16 oz., and 32 oz., 128 oz., and 5 qt. sizes. The saline solution is a 16-oz. size. The eyewash concentrate is in 70 oz. and 180 oz. sizes.

No consumer complaints or injuries were reported before the company issued the recall. For further information, contact H.L. Bouton at (508) 759-8000. ▼

NIOSH names acting director to replace Rosenstock

Lawrence J. Fine, MD, MPH, was named acting director of the National Institute for Occupational Safety and Health (NIOSH) when Linda Rosenstock, MD, MPH, left to become dean of the School of Public Health at the University of California, Los Angeles. Fine is director of NIOSH's Division of Surveillance, Hazard Evaluation, and Field Studies. ■



Respiratory Protection OSHA Training Course — Nov. 28-Dec. 1, Des Plaines, IL. Course covers the establishment, maintenance, and monitoring of a respirator program.

Biohazards OSHA Training Course — Dec. 12-15, Des Plaines, IL. Course covers the recognition, evaluation, and control of biological hazards, including TB and bloodborne pathogens. Continuing education credits are available from the American Board for Occupational Health Nurses. Courses are also offered at other locations and dates. For more information, contact the OSHA Training Institute, 1555 Times Drive, Des Plaines, IL 60018-1548. Telephone: (847) 297-4913. Web site: http://www.osha-slc.gov/OshDoc/Directive_data/TED_1_2000-06.html.

Safe Patient Handling and Movement — Jan. 8-10, St. Pete Beach, FL. Sponsored by the VISN 8 Patient Safety Center of Inquiry, James A. Haley Veterans' Hospital, Tampa, FL. (813) 972-2000. Web site: www.patientsafetycenter.com. ■

EDITORIAL ADVISORY BOARD

Kay Ball, RN, MSA, CNOR, FAAN
Perioperative Consultant/
Educator, K&D Medical
Lewis Center, OH

Jeanne Culver, RN, COHN-S
Clinical Manager, Employee
Occupational Health Services
Emory University Hospital,
Atlanta

Guy Fragala, PhD, PE, CSP
Director, Environmental Health
and Safety
University of Massachusetts
Medical Center, Worcester, MA

Charlene M. Gliniecki, RN, MS,
COHN-S
Director, Employee Health
and Safety
El Camino Hospital,
Mountainview, CA
Assistant Clinical Professor
University of California,
San Francisco

Mary Ann Gruden, MSN, CRNP,
NP-C, COHN-S/CM
Executive President
Association of Occupational
Health Professionals in
Healthcare
Reston, VA
Manager
Employee Health Service
Heritage Valley Health System
Sewickley Valley Hospital,
Sewickley, PA

Janine Jagger, PhD, MPH
Director, International Health
Care Worker Safety Center
Becton Dickinson Professor of
Health Care Worker Safety
University of Virginia Health
Sciences Center,
Charlottesville, VA

Geoff Kelafant, MD, MSPH,
FACOEM
Medical Director, Occupational
Health Department
Sarah Bush Lincoln Health
Center, Mattoon, IL
Vice Chairman and
Communications Chairman
Medical Center Occupational
Health Section
American College of
Occupational and Environmental
Medicine
Arlington Heights, IL

Gabor Lantos, MD, PEng, MBA
President, Occupational Health
Management Services
Toronto, Ontario, Canada

Kathleen Golden McAndrew,
MSN, ARNP, COHN-S, CCM,
FAAOHN
Department Director and Nurse
Practitioner

Section of Occupational
Medicine
Dartmouth Hitchcock Medical
Center, Lebanon, NH
Assistant Professor in Medicine
Departments of Medicine and
Community and Family Medicine
Dartmouth College Medical
School, Hanover, NH

Kathleen VanDoren, RN, BSN,
COHN-S
Former Executive President
Association of Occupational
Health Professionals
in Healthcare
Reston, VA

Sharon A. Watts, MS, RNCS, ND
Employee Health Nurse
Practitioner
University Hospitals
of Cleveland
Instructor, Frances Payne Bolton
School of Nursing
Case Western
Reserve University
Cleveland

CE 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. ■

Hospital Employee Health

2000 Index

AIDS (see HIV)

American College of Occupational and Environmental Medicine (ACOEM)

joint physician-nurse conference,
JUL:81

Antineoplastics

and miscarriages, JAN:10

Association of Occupational Health Professionals in Healthcare (AOHP)

joint physician-nurse conference,
JUL:81

position on ergonomics standard,
FEB:13, APR:41

safety campaigns, DEC:140

Bloodborne exposures (see also HBV, HCV, HIV, Needlesticks, Safer needle devices)

HCV risk from needlesticks, FEB:19

patient consent for testing, FEB:20

Centers for Disease Control and Prevention (CDC)

advice on flu vaccine delay, SEP:97

bioterrorism preparedness, DEC:133

boosting flu vaccine supply, DEC:138

needlestick injuries drop, JUN:67

no recommendations on HCV

prophylaxis, OCT:57

no restrictions on HCWs with HCV,
AUG:89

pandemic flu software, NOV:131

planning for pandemic flu, JUL:73

resources on TB, HCV, JUL:83

report on PEP, JAN:7

Chemical hazards

chemical sensitivity lawsuit, NOV:130

in surgical smoke, APR:37

Employee health services (EHS)

and aging of RN work force, OCT:109

assessing staff needs, AUG:87

creating a safety climate, NOV:121

downsizing of staff, AUG:85

job satisfaction, AUG:88

privacy of medical records, MAY:58

producing revenue, JUN:61

safety campaigns, DEC:140

salary survey, NOV:57

smoking cessation programs, OCT:116

Ergonomics (see also Musculoskeletal injuries)

lack of impact of proposed standard,
NOV:125

opposition to ergonomics standard,
APR:41

proposed OSHA standard, FEB:13,
FEB:18, MAY:51, OCT:115

repetitive stress disorder, MAY:49

Washington state rule, AUG:94

zero lift policy, FEB:15

Food and Drug Administration (FDA)

proposed rule on labeling latex gloves,
MAR:25

Hand washing

need for better hygiene, JUN:68

Hepatitis A virus

vaccinations for HAV, MAY:57

Hepatitis B virus

comparison of vaccinations, JUL:82

Hepatitis C virus

and risk from needlesticks, FEB:19

discrimination suit, JUL:82

no CDC recommendation on HCV

prophylaxis, OCT:57

no restrictions on HCWs with HCV,

AUG:89

nurse with HCV, OCT:57

Human immunodeficiency virus (HIV)

patient consent for testing, FEB:20

seroconversion after PEP, MAR:35

Immunizations

boosting HCW flu vaccination, OCT:114

CDC boosts flu vaccine supply, DEC:138

compliance with guidelines, OCT:117

flu vaccine delay, AUG:95, SEP:97

update of flu recommendations, JUL:77

vaccinations for HAV, MAY:57

Infection control

artificial nails and staph infection,
MAY:56

bacteria carried by HCWs on ordinary
items, MAY:55

bioterrorism preparedness, DEC:133

detection of influenza, OCT:112

planning for pandemic flu, JUL:73

possible bioterrorism agents, DEC:136

preventing nosocomial influenza,
OCT:113

risk of bioterrorism, DEC:135

Influenza

boosting HCW vaccination, OCT:114

CDC boosts flu vaccine supply,
DEC:138

detection of influenza, OCT:112

flu vaccine delay, AUG:95, SEP:97

pandemic flu software, NOV:131

planning for pandemic flu, JUL:73

protecting workers in a pandemic,
JUL:76

update of flu recommendations, JUL:77

Injury rates

influenced by staffing, DEC:141

needlestick injuries drop, JUN:67

OSHA targets hospitals with high rates,
JUN:64

with safety devices, OCT:57

Joint Commission on Accreditation of Healthcare Organizations

partnership with OSHA, AUG:91

Latex allergy

and Koop controversy, JAN:11

comparison of glove performance,
MAY:59

cost to workers' comp, MAR:29

early signs of, SEP:107

hospital goes latex-free, MAR:31

legal victories for plaintiffs, NOV:129

proposed rule on labeling latex gloves,
MAR:25

reducing latex risk, MAR:31

survey on latex allergy, MAR:30

Lawsuits

chemical sensitivity suit, NOV:130

HCV discrimination suit, JUL:82

legal victories for latex plaintiffs,
NOV:129

Legislation

California law as model, SEP:99

Congress passes national law, DEC:137

national needlestick bill introduced,
NOV:131

New Jersey adopts needlestick law,
MAR:32

new state laws, JUL:83

why more states adopt laws, APR:46

Literature Review

JAN:10
MAR:35
MAY:59
JUN:71
JUL:82
OCT:117

Musculoskeletal injuries

and aging of RN work force, OCT:109
proposed OSHA standard, FEB:13,
FEB:18, MAY:51, OCT:115
repetitive stress disorder, MAY:49
zero lift policy, FEB:15

National Institute for Occupational Safety and Health (NIOSH)

alert on safer needle devices, FEB:21
manual on TB respirators, FEB:24
new acting director, DEC:144

Needlesticks (see also Safer needle devices)

California law as model, SEP:99
Congress passes national law, DEC:137
guide for selecting devices, FEB:22
HCV risk from needlesticks, FEB:19
impacted by safety climate, NOV:121
improving use of safer needles, APR:45
needlestick injuries drop, JUN:67
national bill introduced, NOV:131
New Jersey adopts needlestick law,
MAR:32
NIOSH alert on safer needle devices,
FEB:21
OSHA issues compliance directive,
JAN:1
patient consent for testing, FEB:20
re-evaluation of devices, JAN:6
reporting of, SEP:101
summary of OSHA directive, JAN:3
union checklist on complaints, FEB:23
unions trigger OSHA complaints, JAN:4

Nosocomial infections

artificial nails and staph infection,
MAY:56
bacteria carried by HCWs on ordinary
items, MAY:55
preventing nosocomial influenza,
OCT:113

Occupational Safety and Health Administration (OSHA)

advice on inspections, AUG:93
and surgical smoke, APR:37
bloodborne pathogen compliance
directive, JAN:1
on-line complaints, JUL:84
opposition to ergonomics standard,
APR:41

partnership with Joint Commission,
AUG:91
possible delay of TB standard, JAN:9
proposed ergonomics standard, FEB:13,
FEB:18, MAY:51, NOV:125, OCT:115
repetitive stress disorder, MAY:49
self-audits, OCT:119
shelves bulletin on surgical smoke,
JUL:78
summary of OSHA directive, JAN:3
targeting hospitals with high rates,
JUN:64
unions trigger OSHA complaints, JAN:4
user-friendly ergonomics standard,
FEB:17
Voluntary Protection Program,
NOV:123

Postexposure prophylaxis

CDC report on PEP, JAN:7
on-call advice, JUL:80
seroconversion after PEP, MAR:35

Reproductive hazards

antineoplastics and miscarriages,
JAN:10
assessing risks, SEP:104

Safer needle devices

and cost-savings, MAY:52
and injury rates, OCT:SUP
California law as model, SEP:99
Congress passes national law, DEC:137
ECRI rates devices, MAY:54
guide for selecting devices, FEB:22
improving use of, APR:45
insurer mandates safer devices, MAR:32
New Jersey adopts needlestick law,
MAR:32
NIOSH alert on safer needle devices,
FEB:21
OSHA issues compliance directive,
JAN:1
re-evaluation of devices, JAN:6
reporting of needlesticks, SEP:101
sharps safety carnival, SEP:103

Safety climate

creating a safety climate, NOV:121
relationship to patient safety, DEC:139
safety campaigns, DEC:140

Salary survey

EHPs justify worth, NOV:SUP

Staffing

and aging of RN work force, OCT:109
assessing staff needs, AUG:87
downsizing of staff, AUG:85
EHPs justify worth, NOV:SUP
impact on injury rates, DEC:141
job satisfaction, AUG:88

no restrictions on HCWs with HCV,
AUG:89
privacy of medical records, MAY:58

Standard/Universal precautions

and bioterrorism preparedness,
DEC:133, DEC:135
improving adherence to universal
precautions, JUN:70

Substance abuse

creating a drug-free program, APR:43
limits of drug testing, APR:42
drug testing as preemployment screen,
JUN:65

Surgical smoke

OSHA regulation of, APR:37, JUL:78
selecting evacuator, APR:40

Tuberculosis

false-positive TB tests, SEP:105
manual on TB respirators, FEB:24
possible delay of TB standard, JAN:9
proposed TB rule, OCT:119
screening tool, JUN:71

Unions

negotiating on safety issues, DEC:141
unions trigger OSHA complaints, JAN:4
union checklist on complaints, FEB:23

Vaccinations (see Immunizations)

Wellness programs

lower workers' comp claims, MAR:33
smoking cessation programs, OCT:117

Workers' compensation

cost of latex allergy, MAR:29
insurer mandates safer devices, MAR:32