FOR MORE THAN 23 YEARS

Hospital Employee Health®

THOMSON
AMERICAN HEALTH CONSULTANTS™

IN THIS ISSUE

MARCH 2005
VOL. 24, NO. 3 • (pages 25-40)

OSHA coaxes employers to adopt ergonomics — 'to do the right thing'

No work yet on hospital-based guidelines

Employers who want "to do the right thing" to confront musculoskeletal disorder (MSD) hazards can expect more help from the U.S. Occupational Safety and Health Administration (OSHA) with case studies of best practices and increased outreach.

Yet for those who haven't addressed ergonomics, encouragement — not enforcement — remains OSHA's predominant strategy. For hospitals, an industry with one of the highest rates of work-related MSDs, even the release of voluntary guidelines has not been determined.

Hospitals were among the 19 industries targeted by the National Advisory Committee on Ergonomics (NACE) for ergonomic guidelines. But development of hospital-based guidelines has not begun, and it is likely to include all hospital workers rather than focusing on patient handling, says **Audrey Nelson**, PhD, RN, FAAN, director of the Patient Safety Research Center at the James A. Haley Veterans Hospital in Tampa, FL, and chair of the NACE outreach subgroup.

That broader focus may dilute the impact on nursing and patient handling, where most of the hospital injuries occur, she says. Nelson notes that the Bureau of Labor Statistics has identified nursing as one of the top 10 most hazardous occupations, year after year. "The fact they remain on the list tells me . . . there certainly is room for improvement," she says.

The challenges involved in addressing ergonomics were apparent as NACE completed its two-year tenure, which sometimes was marked by contentious debate. Some ergonomic experts boycotted a symposium hosted by NACE last year; they asserted the panel was just rehashing issues that already had been well studied. Then NACE stalled as it debated the definition of MSDs. Ultimately, it was unable to come to an agreement.

NACE managed to turn controversy into consensus with its recommendations for OSHA to publish resource guides and success stories and support further research. But action on ergonomics will depend upon the new leadership at OSHA.

MSDs remain the No. 1 work-related injury in hospitals. Defining MSDs actually was not a task that had been assigned to the committee, notes chairman **Carter Kerk**, PhD, PE, CSP, CPE, associate professor in the industrial engineering program at the South Dakota School of Mines and Technology in Rapid City.

"In the end, we did unanimously reach consensus on the wording in this document," explains Kerk, who points to the myriad recommendations released by the panel over the two-year period. **(For the NACE statement on MSDs, see box at right.** A full list of recommendations is available at www.osha.gov/SLTC/ergonomics/recommendations.html.)

Hospital Employee Health® (ISSN 0744-6470), including **JCAHO Update for Infection Control** and **Bioterrorism Watch**, is published monthly by Thomson American Health Consultants, 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: ahc.customerservice@thomson.com. Web site: www.ahcpub.com.

Subscription rates: U.S.A., one year (12 issues), $449. 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 $75 each. (GST registration number R128870672.)

This continuing education offering is sponsored by Thomson American Health Consultants, which is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation. Provider approved by the California Board of Registered Nursing, provider number CEP 10864, for approximately 18 contact hours per year.

To reveal any potential bias in this publication, and in accordance with Accreditation Council for Continuing Medical Education guidelines, we disclose that Ball (editorial advisory board member) is a consultant and stockholder with the Steris Corp. and is on the speaker's bureau for the Association of periOperative Registered Nurses. Fine, Fisher, Fragala, Garb, Gruden, Jagger, Lantos, Shea, and Strode (board members) report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study.

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@thomson.com).
Editorial Group Head: **Coles McKagen**, (404) 262-5420, (coles.mckagen@thomson.com).
Senior Production Editor: **Ann Duncan**.

Editorial Questions

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

THOMSON
AMERICAN HEALTH CONSULTANTS

Promoting ergonomics without defining MSDs

The National Advisory Committee on Ergonomics completed its two-year term with recommendations and these statements about ergonomics and musculoskeletal disorders (MSDs):

- **Ergonomics is a noun, not an adjective.** It is recommended that it be used as such in formal documents. Hazards exist in the form of poorly designed work practices and/or workplaces. Ergonomics is a process that can be used beneficially to address job and workplace design — the human interface with the work system. Improved safety characteristics occur in concert with productivity improvements. Once workers no longer need to devote maximum energy to overcoming the demands of their work practices and/or workplaces, they can devote those same energies to productivity and quality aspects of their jobs.
- **The pursuit of a single definition of MSDs has not reached consensus.** The various/numerous MSD definitions cover a host of conditions limited only by those doing the defining, none of which directly helps to reduce the number of such disorders. The U.S. Occupational Safety and Health Administration should continue the development of guidelines independent of any final definition of MSDs.

MSDs are a consequence of exposures to risk factors of a multifactorial nature. Although the exact cause of a specific MSD may not be known, and the precise effectiveness of an intervention may not be predictable, the objective of ergonomics is to reduce, to a practical minimum, the demands (e.g., physiological, cognitive, behavioral) of doing the work by controlling these exposures. To this end, a number of tools and guidelines may be useful.

- **Ergonomics should be included in comprehensive occupational safety and health programs.** Ergonomics should be integrated into business processes in the same way as job safety analysis, personal protective equipment, hazard assessments, process hazard analysis, and similar occupational safety and health tools.
- **It must be recognized that there are nonoccupational components (e.g., general health, nonwork, leisure, play, and physical daily living activities) that also contribute to the development and occurrence of MSDs.** To reach outside the work arena, these components are best addressed by educating the work force concerning such nonwork hazards. ■

With no ergonomics standard, OSHA must convince employers that it is in their best interest to implement an ergonomic program. The NACE recommendations focus on this persuasive effort.

Expect more templates of success, including case studies of best practices on OSHA's web site. Look for more research focused on the benefits of ergonomics.

Some employers won't implement ergonomics without a regulation, Kerk concedes. But for the majority of companies, better information about cost benefits and best practices will help them make improvements, he adds.

"Some of those companies' [administrators] are going to say, 'I like those examples; we can do that, too,'" Kerk says. "A lot of things are low cost or no cost. That's where the biggest impact is going to be in terms of reaching the most workers."

For hospitals, that means molding ergonomic interventions to the needs of different units.

"There is not a one-size-fits-all solution for this," Nelson notes. "You end up with a different solution for critical care than long-term care."

New nurses also should be taught to expect lift equipment and other tools to reduce their risk of injury, she says. **(See related article, at left.)**

Critics charge that NACE was dominated by opponents of ergonomic interventions and the panel's recommendations would have little effect.

"It was more of a charade than a real effort to address the staggering number of injuries that workers suffer from the leading cause of workplace injury and illness in the country," says **Bill Borwegen**, MPH, health and safety director of the Service Employees International Union.

Yet Nelson found some benefit in the makeup of NACE and expressed hope that OSHA would continue to work with stakeholders on ergonomics.

"There was a diversity of thinking and backgrounds and approaches, and I think that's important," she says. "It just mirrored the controversy that's going around nationally. All the sides were represented." ■

Nurses still taught to use 'body mechanics'

This is what most student nurses still are being taught about lifting: Have the proper body mechanics. Put your arms under the patient's armpits. Rock on the balls of your feet and lift and propel the patient.

"It's just as appalling as it sounds," says **Audrey Nelson**, PhD, RN, FAAN, director of the Patient Safety Research Center at the James A. Haley Veterans Hospital in Tampa, FL, and a member of U.S. Occupational Safety and Health Administration's (OSHA) National Advisory Committee on Ergonomics. "Eighty-five percent of our schools of nursing are teaching the hook-and-toss manual-lifting technique as their primary approach. This technique has been banned in most of Europe and Australia as being unsafe for the nurse and unsafe for the patient."

Schools of nursing will be introduced to a new patient-handling curriculum at the Safe Patient Handling and Movement Conference sponsored by the Department of Veterans Affairs' Patient Safety Research Center and the American Nurses Association (ANA). The conference will be held Feb. 28-March 3 in St. Petersburg, FL. The ANA also is mailing information about safe patient handling to every hospital in the country. The mailing is sponsored by Johnson & Johnson.

"There needs to be a paradigm shift with respect to nurse educators and what is needed to prevent back injuries," says **Butch DeCastro**, PhD, MSN/MPH, RN, senior staff specialist for the ANA in Silver Spring, MD. DeCastro and others want nursing students to learn about the importance of ergonomics to ensure their safety — and that they will expect more from their future employers. "These are [issues] we think new nurses should have on their minds in job interviews," he says.

[For information about the Safe Patient Handling and Movement Conference, go to www.patientsafetycenter.org or call (813) 558-3902.] ■

Breathe easy with fit-test programs that work

Link program with emergency preparedness

(Editor's note: For many hospitals, annual respirator fit-testing represents a costly and time-consuming burden. But these two hospitals found a way to manage fit-testing — one by emphasizing just-in-time readiness, the other by expanding fit-testing into hospitalwide emergency preparedness. They shared their approach with Hospital Employee Health.*)*

Ever since Sept. 11, when the first victims of the World Trade Center tragedy came across the river to Long Island College Hospital in Brooklyn, NY, **Lewis Kohl**, DO, chairman of emergency medicine and emergency preparedness, has been

even more acutely aware of the hazards posed to health care workers.

It could be severe acute respiratory syndrome (SARS), avian influenza, or smallpox. It could be an act of terrorism. It could be some newly emerging infectious disease. Employees need to know how to respond — and how to protect themselves. And respirator fit-testing is a part of that, he says.

"Our perspective here was we really need to fit-test everybody if it's at all possible," Kohl adds, noting that his hospital has 2,500 on-site employees. "You stop and say, 'That's impossible.' Everyone's going to say you just don't have the resources."

He says he found the resources by combining fit-testing with a comprehensive emergency preparedness program. The hospital teamed up with the Service Employees International Union (SEIU), which had funds and trainers to provide an eight-hour course — including money to provide backup for employees who were pulled off their shifts for the training.

The SEIU received a hazardous materials training grant from the National Institute of Environmental Science, which is part of the National Institutes of Health.

For some hospitals, training funds may be available from the National Bioterrorism Hospital Preparedness Program, which is part of the Health Resources and Services Administration. (Those funds may be distributed by state health departments. More information is available at www.hrsa.gov/bioterrorism.)

The eight-hour, one-day course covers a variety of topics, including hazardous materials, MSDS sheets, when to use a respirator and how to put it on and take it off safely, and the hospital's emergency response plan. During the day, employees are pulled out for their respirator fit-testing.

There are 15 to 25 employees in each class. So far, the hospital has trained more than 1,300 employees in various departments and job titles.

"It has worked as a seamless flow," says **Steve Schrag**, eastern region hazmat program coordinator for the SEIU, which assists with the training. "People learn about what they're exposed to, and they learn how to protect themselves. They get an opportunity to wear a respirator and learn how to put it on properly."

The training has raised awareness in a number of areas, Kohl adds. For example, trainers discuss the hazards of blood and body fluids and of the respiratory secretions of coughing patients.

That improves employee compliance with using personal protective equipment and following respiratory hygiene, such as asking patients with a cough and a fever to wear a mask.

As part of the program, the hospital now has 50 employees trained to conduct fit-testing. The fit-testing showed that more choices were needed to accommodate different facial structures, and the hospital now provides three different styles as well as different sizes of N95 filtering facepiece respirators. The hospital also was able to set up as many as six fit-testing stations at a time — as long as it used a spacious room that would not become saturated with the saccharin smell, he notes.

The SEIU may provide a four-hour refresher course. But Kohl says he's confident follow-up fit-testing and training updates will be feasible.

Meanwhile, with the training, employees know where to go and what to do if disaster strikes. The class uses group activities to help employees walk through scenarios, from a hazardous materials spill to an unknown infectious disease.

"My obligation is to make sure everyone in the hospital knows what the disaster plan is," he explains.

Flexibility is key ingredient

Flexibility is the watchword for the respiratory protection program at Dartmouth-Hitchcock Medical Center in Lebanon, NH.

"The crux of our program is that if suddenly we had avian flu outbreak and needed to go from our 450 trained [fit-tested] staff to 5,000 trained practitioners, we would have the ability to do that in a day or two," says **Lindsey C. Waterhouse**, manager of safety and environmental programs.

That feat is possible because of clinical respiratory program administrators, who are trained in each unit and available on each shift. "[They] maintain their own program under our guidance," he says.

Some units, such as the emergency department and intensive care unit, opted to fit-test all of their staff because of their greater risk of exposure to tuberculosis or other airborne infectious diseases. Most units, however, fit-test a core group of employees and rely on the readiness plans. The medical center includes the Mary Hitchcock Memorial Hospital and Dartmouth-Hitchcock Clinic.

The program has been touted by the U.S. Occupational Safety and Health Administration (OSHA) as a model for other hospitals. **Donald Wright**, MD, MPH, OSHA's director of the office

of occupational medicine, notes that Dartmouth looked beyond tuberculosis in designing its program — and yet still minimized annual fit-testing.

"You can develop a comprehensive program and preserve valuable financial resources in the hospital," he says. "I think the key to this program is they've empowered the local departments."

The hospital began evaluating its fit-testing after the SARS outbreak in Toronto. The SARS Working Group later evolved into the Readiness Working Group, which focuses on respiratory diseases. It includes the directors of infection control and safety, occupational medical physician, vice president of clinical services, nursing and nursing education, and public affairs.

The working group reviewed risk assessments of the departments and implemented the respiratory protection program in the high-risk units immediately, says Waterhouse. The working group then identified affected departments that needed to develop the program. **(See box, at right.)**

The Safety and Environmental Programs office conducts periodic audits of the respiratory protection program. For example, Waterhouse may visit a unit and ask to speak to an employee who is respirator qualified. He then checks that person's knowledge about what model and size they wear, and asks other questions about respirator use.

Meanwhile, the hospital also maintains a "protected Code Blue" cart for patients with a respiratory infectious disease who code. Those carts contain powered air-purifying respirators, which provide more protection and do not require fit-testing.

The readiness concept works, says Waterhouse. In one case, the emergency department notified a new unit that a patient would soon be admitted to a negative pressure isolation room. Before the patient arrived on the unit, a nurse educator (the clinical respiratory program administrator) was able to fit-test staff.

It isn't necessary to maintain the annual fit-testing for all clinical staff, he says. "In one of our worst years, we had six TB cases," Waterhouse notes. "To fit-test everybody for six TB patients is kind of ridiculous."

OSHA expects hospitals to tailor their respiratory protection programs to the risk of exposure, concurs Wright.

"Every institution, whether it is a TB clinic, medical clinic, or hospital emergency room, has to do a hazard assessment to determine what their particular risk is and make appropriate decisions based on that," he says. ■

Fit-Test Programs

These programs were identified by the Dartmouth-Hitchcock Medical Center (DHMC) in Lebanon, NH, as needing a respiratory protection program:

1. Locations having negative pressure rooms:
- 1 West
- 3 West
- PICU (3 East)
- Adult Progressive Care (4W)
- 4 East
- 5 West
- 5 East
- PACU
- ICN
- CTICU
- ICU
- CCU
- Pulmonary Clinic
- Pediatric Clinic
- Same-Day Surgery
- Emergency Department
- Surgical Special Care Unit (4 West)*
- Respiratory Therapy**
- Code Blue Team***

* Adult Progressive Care is identified as a possible location to support infectious respiratory disease patients. Rooms would be modified as negative pressure rooms using portable HEPA filtered negative pressure fans.

** Respiratory therapy will support most of the locations identified above requiring staff to be fit tested and trained annually.

*** Same justification as Respiratory Therapy

2. Gateway or DHMC medical locations where patients are likely to be seen initially and diagnosed with an infectious respiratory disease:
- GIM Clinic
- Emergency Department
- Fast Track
- IV Team
- Dialysis
- Birthing Pavilion
- CCU
- Respiratory Care
- ACOS Members
- Pulmonary Clinic
- Anesthesia
- Buck Road — Community Health Center
- Lyme Road (GIM)
- PICU (3 East)

3. Ancillary Care Areas
- Housekeeping
- Occupational Medicine
- Radiology
- Infectious Disease/Infection Control
- Transportation

Goggles are important barrier to infection

Eyewear underappreciated form of PPE

Amid the debate over respiratory protection for health care workers, another form of personal protective equipment (PPE) has received little attention. Goggles are an important component of infection control, as health care workers are commonly exposed to infectious disease hazards through the mucous membranes of the eye.

"Goggles are well demonstrated to decrease transmission of pathogens like RSV [respiratory syncytial virus]," says **Kent Sepkowitz**, MD, director of hospital infection control at Memorial Sloan Kettering Cancer Center in New York City. "They almost certainly play a role in reducing transmission of SARS [severe acute respiratory syndrome] and the common cold."

In fact, transmission isn't as likely to occur from breathing in the droplets when someone sneezes, he says. It often occurs when someone touches a contaminated surface, then rubs his or her eye. "The goggle is a barrier that keeps you from rubbing your eye," Sepkowitz explains.

Unfortunately, studies indicate goggles are underused. In one study of universal precautions in a community hospital emergency department, goggles were used only about half the time they were appropriate.[1]

"Traditionally, protection of the eyes has been recommended as part of universal precautions," says **Linda Chiarello**, an infection control consultant with the Centers for Disease Control and Prevention (CDC) in Atlanta.

"I don't think we really know the role of eye protection for preventing spread of respiratory diseases," she says. "In general, what we need to prevent is hand-to-eye touching."

A 1986 study showed goggle use helped prevent the spread of RSV infection in an infant ward. When goggles were used routinely during a three-week period, only 5% of the health care workers and 6% of the patients acquired nosocomial infections. When the goggle use ceased during a subsequent three-week period, 34% of the health care workers and 43% of susceptible infants became infected.[2]

Goggles and face shields were important components of protective gear during the SARS outbreak in 2003. But there has been little research on the effectiveness of different kinds of PPE in that outbreak, Chiarello notes.

One thing is clear: Goggles are essential to protect against splashes of blood and body fluids when health care workers are performing splash-prone procedures. For example, goggles are necessary when accessing a vessel under high pressure (such as arterial puncture), suctioning, or performing a procedure that causes aerosolization of body fluids, Chiarello says. "Preventing blood splashes to the eye is very important," she says.

There have been at least four documented cases of HIV and/or hepatitis C infection that involve splashes to the eye, according to information from the International Health Care Worker Safety Center at the University of Virginia in Charlottesville. In one case, a health care worker contracted both HIV and hepatitis C from an eye exposure.[3]

Eye protection is especially important in the surgical setting — even by workers who are not in the immediate proximity of the operative site, says **Jane Perry**, MA, the center's director of communications. Health care workers failed to wear protective eyewear (goggles, face shields, or eyeglasses with side shields) in 74% of 367 surgical exposure cases reported to the safety center's EPINet system from 1997 to 2001, according to an analysis by Perry.[4] In 24% of the eye exposure cases, the eye protection failed, perhaps because of gaps or other design flaws, she says.

"It's important to look at what people are wearing in these settings and make sure they actually provide the protection that's needed," Perry adds. For example, a simple foam band integrated into the face shield or device may prevent splashed blood from dripping down a health care workers face into the eyes.

"Even people who aren't working close to the operative site can get splattered or sprayed by blood," she says. "That needs to be considered when you're looking at requirements for wearing goggles and face shields."

One other important point: Eyeglasses are not a substitute for goggles. In fact, they may discourage health care workers from using goggles, leaving them unprotected from exposures, infection control experts say.

As bloodborne pathogen exposures decline with the use of safer sharps, other exposures may gain more attention. "The eyes are a proven route of transmission for bloodborne pathogens," Perry notes. "It's worth spending the effort and energy

(Continued on page 36)

JCAHO Update for Infection Control

News you can use to stay in compliance

Patient safety goals include key infection control issues

ICPs tackle issue of investigating nosocomial deaths

The Joint Commission on Accreditation of Healthcare Organizations has set patient safety goals for 2005 that include several high-profile infection control issues.

The goals include high compliance with hand hygiene; reducing influenza and pneumonia in long-term care; and a continuation of the controversial edict to investigate patient deaths linked to nosocomial infections.

Regarding long-term care, the JCAHO will be looking for nursing homes in 2005 to develop and implement protocols for administration of both influenza and pneumococcal vaccine. **(See related story, p. 33.)**

In the hand hygiene area, the Joint Commission has set high expectations for compliance with guidelines recommended by the Centers for Disease Control and Prevention (CDC).

The hand hygiene goal carries over from 2004, but the Joint Commission added some teeth to the requirement in a Jan. 20, 2005, revision posted on its web site.

Compliance with the CDC guidelines — which emphasize the use of alcohol hand rubs — will be "surveyed through interviews with caregiver staff and direct observation," JCAHO stated. "Caregivers should know what is expected of them with regard to hand hygiene and should practice it consistently. A minimum of 90% compliance will be expected."

The compliance requirement was set at the 90% level despite — or perhaps because of — the dismal historic record of hand washing in health care facilities.

Many studies over the years have found that health care workers typically wash their hands before only about 50% of patient encounters.

Regardless, JCAHO surveyors will score hand hygiene compliance by counting observations.

"One occurrence equals one observation of noncompliance with CDC Category I recommendations," the Joint Commission warned.

"Three occurrences equal a Requirement for Improvement. There is no 'partial compliance' for national patient safety goals," it said.

Disclosure laws add controversy

While infection control professionals may welcome the tough stance on hand hygiene, another patient safety goal continues to be controversial. The JCAHO 2005 patient safety goals for hospitals include the recommendation to "manage as sentinel events all identified cases of unanticipated death or major permanent loss of function associated with a health care-acquired infection."

The goal is carried over from 2004, though some ICPs have argued that ascribing deaths to infections is a complex matter confounded by underlying illness and a host of other variables. The original concerns are being compounded by the national movement to require disclosure of infection rate data.

"There must be five states now that require mandatory reporting," says **Robert Wise**, MD, JCAHO vice president for standards. "We're not, at this point, requiring mandatory reporting. The crux of our infection control recommendation is for an organization to better understand its own risks. Clearly, infections that cause death [are occurring], but they are very difficult for a hospital to identify."

Indeed, as state disclosure laws spark discussions in various forums, questions are arising

about the accuracy of even the most basic infection control data. "How does one even track nosocomial infections is being questioned," Wise says.

"The difficult issue then is to determine if the infection should be associated with a sentinel event. We know there should be more reported. How many more is the question," he notes.

Indeed, the dearth of data and pressure from the press first raised the issue in 2003, when the Joint Commission sent out a bulletin noting that "the deaths of patients from hospital-acquired infections are being seriously underreported across America."

The *Sentinel Event Alert*, sent to nearly 17,000 JCAHO-accredited health care facilities, cited the CDC estimates that more than 2 million patients annually develop infections while hospitalized for other health problems and that nearly 90,000 die as a result of these infections.

Despite those high figures, the Joint Commission's patient safety reporting database — seven years old at the time — included only 10 such reports that cover 53 patients, the alert stated. But those reports are gradually increasing, thanks to some ICPs who have embraced the challenge and developed novel ways to track and report the patient fatality data.

Finding data without reinventing wheel

For example, a pilot program to track the data began last year at Memorial Sloan-Kettering Cancer Center in New York City, explains **Janet Eagan**, MPH, CIC, infection control manager. Eagan and colleagues began by reviewing 10% of patient deaths that occurred in 2003.

To determine if the deaths were related to a nosocomial infection, they established "exclusion criteria" to rule out deaths due to other causes. Exclusion criteria used in the program are death within 72 hours of admission; admissions with fever and chemotherapy-related neutropenia; stage IV incurable metastatic cancer; and positive microbiology culture obtained within 72 hours of admission.

Any of those findings would rule out a nosocomial infection as the cause, and the cases that are left are investigated more thoroughly. In the pilot program, five patient deaths did not meet exclusion criteria and were referred to an infectious disease physician for review.

Nosocomial infection was not found to be the cause of death in any of the cases, and no sentinel event investigations were undertaken. The program now has been implemented on an ongoing basis.

"Now, all discharges as deaths are reviewed by a person in our quality assurance department," Eagan says.

"They review it, and the [cases] that meet exclusion criteria are discarded. Anywhere from 4% to 6% of them are referred to an infectious disease physician. If the physician then determines that it is possible that it was a nosocomial death, it will go to a multidisciplinary review and a root-cause analysis. We report these [data] quarterly to our hospital infection committee," she points out.

For example, in the third quarter of 2004 there were 137 deaths reported, 130 (95%) of which met exclusion criteria. The remaining seven cases were referred for review.

"All of those referrals were found to be deaths that were not caused specifically by the nosocomial infection," Eagan says.

ICPs considering such programs should look at their own patient population, as the exclusion criteria may differ from a cancer treatment center. The system in place at Sloan-Kettering is relatively straightforward, has passed muster with Joint Commission surveyors, and does not require a lot of additional time and labor, she emphasizes.

"We sat down with a group of people and said, 'How are we going to do this?'" Eagan recalls. "We didn't reinvent the wheel because we were using QA staff who look at charts anyhow. The point is you have to do it the best you can.

"It's not going to be 100%, but it's very close to it. I think that is what everybody needs to understand. A lot of places developed these very intense algorithms that are just almost impossible to do. This is very possible, almost simplistic, but it [addresses] the issue," she adds.

NIH center tracking death data as well

A similar surveillance system has been set up at the National Institutes of Health Warren G. Magnuson Clinical Center in Bethesda, MD. ICPs there began by reviewing all in-facility deaths that occurred from Jan. 1 to Sept. 1, 2003 to determine if mortality could be attributed to preventable nosocomial infections.

For the period, 21 deaths were identified. Of those patients, 11 had nosocomial infections at the time of death. Three cases met criteria for

having an infection that may have contributed to the cause of death.

However, none of the deaths was unanticipated due to the patients' advance underlying disease, reports **Angela Michelin**, MPH, an ICP in the epidemiology service at the clinical center.

The patients were determined to have nosocomial infections that resulted from severe immunosuppression and end-stage disease with no anticipated improvement from therapy.

In addition to deaths, the ongoing program includes a component to try to identify major loss of function as a result of an infection.

"On a quarterly basis, a list of all in-house deaths is obtained from the medical records department," Michelin explains. "We also request a list of all autopsies from our pathology department so that we know which deaths have autopsy data available."

Overall, data collection sources include infection control surveillance database, death certificates, autopsy reports, electronic information systems, and patient charts.

"Data are collected for the 14-day period prior

JCAHO urges flu, pneumonia prevention in long-term care

Documented vaccination programs required

The Joint Commission on Accreditation of Healthcare Organizations has set a 2005 patient safety goal for long-term settings to reduce the risk of influenza and pneumococcal disease.

ICPs in such settings should develop and implement a protocol for administration and documentation of both the influenza vaccine and the pneumococcal vaccine.

Protocols also should be put in place to identify new cases of influenza and to manage an outbreak. The Joint Commission provides the following answers to some common questions about the new patient safety goal:

Q. Who are the vaccines recommended for?

A. According to the CDC, influenza and pneumococcal vaccinations are recommended for people age 65 years and older and for people of any age who have medical conditions that place them at high risk for complications from influenza. While influenza vaccinations are administered annually, the pneumococcal vaccine generally is a once-in-a-lifetime vaccination that can be given at any time. Both influenza and pneumococcal vaccinations are covered preventive service benefits under Medicare Part B. Although coverage of immunizations for adults is an optional service under Medicaid, virtually all states cover immunizations for high-risk groups such as residents of nursing facilities. (Go to www.cdc.gov/.)

Q. Why are nursing home residents at greater risk for influenza and pneumococcal disease?

A. Nursing home residents, because of their age, underlying health conditions, and closed environment, are especially vulnerable to influenza and pneumococcal disease. During influenza outbreaks in nursing homes, more than half of the residents may become ill; and in some outbreaks, as many as one-third of infected residents have died. Pneumococcal bacterium is the leading cause of serious pneumonia in Medicare beneficiaries and in our most vulnerable high-risk populations. The pneumococcal polysaccharide vaccine (PPV) is effective in preventing pneumococcal bacteremia, an often-fatal complication of pneumococcal pneumonia in adults. Studies indicate that influenza and pneumococcal vaccines are underutilized in institutional settings.

Q. What should organizations do if they are unsure if the resident already received either influenza vaccine or PPV?

A. Current recommendations from the Advisory Committee on Immunization Practices and Epidemiology (ACIP) are to administer vaccine when the person is unsure as to whether he or she has received the vaccine or not. Much of the concern about re-immunizing residents relates to concern about complications from re-immunizing residents. However, several studies have examined this issue and found little data to support any significant increase in complications for people re-immunized with either the influenza or pneumococcal vaccines. According to current Centers for Disease Control recommendations, providers "should not withhold vaccination in the absence of an immunization record or complete medical record. The patient's (or family's) verbal history should be used to determine prior vaccination status. When indicated, the vaccine should be administered to patients who are uncertain about their vaccination history." Re-vaccination within five years after initial PPV immunization results in a slightly greater incidence of local reactions, but has not been associated with any increased risk of systemic reactions or serious complications. ■

to death," she points out. "The infection control practitioners review this information and make the initial decision whether any infections are questionable."

Because a large number of the clinic's patient population is immunocompromised (e.g., stem cell and solid organ transplant, HIV, host defects, oncology) the infections often are unavoidable, she notes.

"But any that are questionable are reviewed in further detail with the hospital epidemiologist," Michelin adds. "We are made aware of infections associated with major permanent loss of function through our more routine practices."

Those include targeted surveillance of high-risk populations through attending multidisciplinary rounds, reviewing daily microbiology logs, and an alert notification system for certain infections from the microbiology laboratory.

"This keeps us well informed of unusual situations, and any that were questionable would similarly be reviewed with the hospital epidemiologist," she says. ■

Lab an area of increasing interest in JCAHO surveys

Now linked to overall hospital accreditation

The Joint Commission on Accreditation of Healthcare Organizations has determined that the laboratory is an "essential service," meaning "failure in the laboratory extends to failure in the hospital," advises compliance consultant **Dave Woodard**, CIC, CLS, manager of Infection Control and Laboratory Services in Fountain Valley, CA.

"That actually was published in [Joint Commission] *Perspectives* in October 2004," he points out.

"It's one of those kind of things that [ICPs] may not know. [The lab] is a hospitalwide issue," Woodard explains.

Clinical laboratories used to be surveyed under a different manual, but "what they are saying now is that the laboratory is an essential part of the hospital, and therefore, whatever they find in the lab overarches into the hospital as well," he adds.

A preliminary denial of accreditation (PDA) in the lab equates to a PDA for the hospital, says Woodard. Similarly, a conditional accreditation in the lab — if the hospital has an existing conditional survey — equates to a PDA.

"There is much more at jeopardy now than before," he notes.

Of course, the lab always has had important infection control implications, but the Joint Commission's new tracer survey methodology makes the connection all the more apparent.

The tracer method involves detailed tracking of selected patients and/or clinical threads, so surveyors may chose, for example, to follow a phlebotomist on blood draws.

"We see them cite hospitals for failure to comply with isolation protocols," Woodard continues. "Because with the tracer methodology, they are out looking at practice. They are going to follow the phlebotomist to go get the blood. If the phlebotomists do not wash their hands, if they don't abide by whatever isolation signs are on the door, if they haven't been fit-tested for their N95 mask [for entering TB patients rooms] — all of those things are then deficiencies in the infection control program."

Surveyors will check also to determine if the lab protocols for blood and bone banks are in line with national laboratory guidelines.

Point-of-care testing is another area of major interest. ICPs should ensure that quality control measures are in place for such testing, and lab diagnostic media are used according to guidelines by the Clinical and Laboratory Standards Institute (www.clsi.org/).

By the same token, if the lab does "wet mounts" for trichomonas, make sure you have a Clinical Laboratory Improvement Amendments certificate in proficiency testing for parasitology, Woodard says.

The Joint Commission currently is being very precise in evaluating each of the elements of lab performance, he advises.

"What the Joint Commission is doing in the laboratory is just like they did in the hospitals about a year ago," Woodard notes.

"The have defined elements of performance. It's not a bad thing, but there is not a lot of wiggle room there. I think it is important that infection control does include the lab in its program," he adds.

"Obviously, it is a high-risk area to employees and there are certainly issues that we in infection control do that are laboratory-dependent, such as all of our microbiology [surveillance]," explains Woodard. ■

CDC recommendations: HCWs need to protect their eyes

The Centers for Disease Control and Prevention (CDC) recommends the use of eye protection when health care workers may be at risk of acquiring infectious diseases through ocular exposure. This includes exposure to blood splashes or to respiratory droplets generated during coughing or suctioning or from touching the eyes with contaminated fingers or other objects. The infectious agents of concern include adenovirus, herpes simplex, *Staphylococcus aureus*, hepatitis B and C, rhinoviruses and HIV.

Here are some questions and answers from CDC:

Question: What types of eye protection should be worn?

Answer: There is wide variety in the types of protective eyewear, and appropriate selection should be based on a number of factors, the most important of which is the nature and extent of the hazard. Eye protection must be comfortable and allow for sufficient peripheral vision and must be adjustable to ensure a secure fit. It may be necessary to provide several different types, styles, and sizes.

Selection of protective eyewear appropriate for a given task should be made from an evaluation of each activity, including regulatory requirements when applicable. These hazard assessments require a clear understanding of the work tasks, including knowledge of the potential routes of exposure and the opportunities for exposure in the task assessed (nature and extent of worker contact). Exposure incident reports should be reviewed to identify those incidents (whether or not infection occurred) that could have been prevented by the proper use of protective eyewear.

Common eye protection devices include:

✔ **Goggles**

Appropriately fitted, indirectly-vented goggles* with a manufacturer's anti-fog coating provide the most reliable practical eye protection from splashes, sprays, and respiratory droplets. Newer styles of goggles may provide better indirect airflow properties to reduce fogging, as well as better peripheral vision and more size options for fitting goggles to different workers. Many styles of goggles fit adequately over prescription glasses with minimal gaps. However, to be efficacious, goggles must fit snugly, particularly from the corners of the eye across the brow. While highly effective as eye protection, goggles do not provide splash or spray protection to other parts of the face.

* Directly vented goggles may allow penetration by splashes or sprays; therefore, indirectly vented or nonvented goggles are preferred for infection control.

✔ **Face shields**

Face shields are commonly used as an infection control alternative to goggles.** As opposed to goggles, a face shield also can provide protection to other facial areas. To provide better face and eye protection from splashes and sprays, a face shield should have crown and chin protection and wrap around the face to the point of the ear, which reduces the likelihood that a splash could go around the edge of the shield and reach the eyes. Disposable face shields for medical personnel made of lightweight films that are attached to a surgical mask or fit loosely around the face should not be relied upon as optimal protection.

** In a chemical exposure or industrial setting, face shields should be used in addition to goggles, not as a substitute for goggles (ANSI Z87.1 — *2003 Practice for Occupational and Educational Eye and Face Protection)*.

✔ **Safety glasses**

Safety glasses provide impact protection but do not provide the same level of splash or droplet protection as goggles and generally should not be used for infection control purposes.

✔ **Full-face respirators**

Full facepiece elastomeric respirators and powered air-purifying respirators (PAPRs) are designed and used for respiratory protection, but because of their design, incidentally provide highly effective eye protection as well. Selection of this type of PPE should be based on an assessment of the respiratory hazard in an infection control situation, but also will provide, as an additional benefit, optimal eye protection.

Question: What eye protection is available for prescription lenses users?

Answer: Many safety goggles or plano (nonprescription) safety glasses fit comfortably over street eyewear and can provide satisfactory protection without impairing the fit of the prescription eyewear. Prescription safety glasses with side protection are available, but do not protect against splashes or droplets as well as goggles. Special prescription inserts are available for goggles. When full facepiece elastomeric negative pressure (i.e., nonpowered) respirators or tight-fitting PAPRs are indicated for respiratory protection, these devices require appropriate prescription inserts to avoid compromising the seal around the face; PAPRs designed with loose-fitting facepieces or with hoods that completely cover the head and neck may be more accommodating to prescription lens wearers.

Contact lenses, by themselves, offer no infection control protection. However, contact lenses may be worn with any of the recommended eye protection devices, including full-face respirators. Contact lens users should rigorously adhere to hand washing guidelines (www.cdc.gov/handhygiene/) when inserting, adjusting, or removing contact lenses.

Question: What combination of eye protection and other PPE should be used?

Answer: Eye protection should be selected in the context of other PPE use requirements. Safety goggles

(Continued on next page)

may not fit properly when used with certain half-face respirators, and similarly, face shields may not fit properly over some respirators. Once PPE requirements have been established for a specific infection control situation, the selected PPE should be pretested to assure suitable fit and protection when used as an ensemble. Elastomeric, full facepiece respirators and PAPRs have the advantage of incidentally providing optimal eye protection. In situations where all combinations of PPE may not be readily available to workers, judicious selection of complementary PPE is important to allow for appropriate protection.

Question: How should potentially contaminated eye protection be removed?

Answer: Eye protection should be removed by handling only the portion of this equipment that secures the device to the head (i.e., plastic temples, elasticized band, ties), as this is considered relatively clean. The front and sides of the device (i.e., goggles, face shield) should not be touched, as these are the surfaces most likely to become contaminated by sprays, splashes, or droplets during patient care. Nondisposable eye protection should be placed in a designated receptacle for subsequent cleaning and disinfection. The sequence of PPE removal should follow a defined regimen that should be developed by infection control staff and take into consideration the need to remove other PPE.

Question: Can another worker reuse my eye protection?

Answer: The eyewear described above generally is not disposable and must be disinfected before reuse. Where possible, each individual worker should be assigned his/her own eye protection to ensure appropriate fit and to minimize the potential of exposing the next wearer. A labeled container for used (potentially contaminated) eye protection should be available in the HCW change-out/locker room. Eye protection deposited here can be collected, disinfected, washed, and then reused.

Question: How should my eye protection be disinfected?

Answer: Health care setting-specific procedures for cleaning and disinfecting used patient care equipment should be followed for reprocessing reusable eye protection devices. Manufacturers may be consulted for their guidance and experience in disinfecting their respective products. Contaminated eye protection devices should be reprocessed in an area where other soiled equipment is handled. Eye protection should be physically cleaned and disinfected with the designated hospital disinfectant, rinsed, and allowed to air dry. Gloves should be worn when cleaning and disinfecting these devices.

(Editor's note: For more information on eye protection, go to www.cdc.gov/niosh/topics/eye/eye-infectious.html.) ■

(Continued from page 30)

to get the equipment that's comfortable and provides all of the protection you need."

References

1. Henry K, Campbell S, Collier P, et al. Compliance with universal precautions and needle handling and disposal practices among emergency department staff at two community hospitals. *Am J Infect Control* 1994; 22:177-178.

2. Gala CL, Hall CB, et al. The use of eye-nose goggles to control nosocomial respiratory syncytial virus infection. *JAMA* 1986; 256:2,706-2,708.

3. Ippolito G, Puro V, Petrosillo N, et al. Simultaneous infection with HIV and hepatitis C virus following occupational conjunctival blood exposure. *JAMA* 1998; 280:28.

4. Perry J. Safety: Protecting your eyes from sprayed, splashed blood. *Outpatient Surgery Magazine* 2003; 8:82. ■

Cut pre-placement exams without cutting corners

Mayo study shows streamline approach works

By streamlining your pre-placement screening and eliminating a full medical exam, you can save time and money without missing any important information.

That was the conclusion of a study at the Mayo Clinic in Rochester, MN. Nurses used a two-page questionnaire that asks about ability to function, lifestyle issues such as alcohol intake, and past exposure to potentially toxic substances such as formaldehyde and latex.

Any red flags on the questionnaire trigger a review by a physician. The streamlined process could save more than $1 million a year, notes **William Buchta**, MD, MPH, medical director of the employee health/occupational medicine program, who has not yet published his study. **(A copy of the questionnaire is inserted in this issue.)** "It's a function-based questionnaire, which is a divergence from the medical model," he says. "All we want to know is what you can do and what you can't do."

The streamlined approach isn't a way to cut corners. It's a better approach, Buchta contends. "A whole general medical examination was not only unnecessary, but it obscured the purpose of the exam, which was, 'Can this person do the essential functions of the job?' We don't need diagnoses. We need [to assess] ability to function."

For example, the medical exam might uncover health problems that aren't work-related, such as acid reflux or high blood sugar. The new hire may then be referred to another physician — but they aren't even employed yet by the hospital.

"Some of these people may have no benefits whatsoever. If we start ordering lab tests, they're going to end up paying out of pocket," he explains.

Yet changing a longstanding practice can be difficult. At Mayo, Buchta formed a task force that included human resources, safety, and employee health. The task force worked on a questionnaire that would pinpoint the issues that are most important in a pre-placement exam.

It started out with the most basic ones: Do you have a disability? Do you have restrictions? Despite the restrictions, can you do the job you've applied for?

"Those three questions answer 90% of what we need to do," he notes.

The task force considered what health issues were most likely to lead to a decision not to place someone in a position. Medical disqualification most often occurred due to recent history of substance abuse.

So it developed questions that relate to illegal drug abuse and alcohol intake. Ten questions deal with functional issues, such as the use of arms and legs. The form also includes some questions related to health promotion, which have no impact on hiring status but can be used in a wellness program after the person becomes an employee. New hires undergo a communicable disease screening.

The task force then tested the form with 175 new hires over a two-month period in 2003-2004. Employee health nurses began incorporating the forms in May 2003. By December, the nurses relied on the questionnaires to make pre-placement decisions.

The new hires still had a general medical exam. "Out of 175 people, one person was given some restrictions after the exam that were not deemed necessary before the exam, but it was for a condition the examiner was already aware of based on history," Buchta explains. "That gave us some confidence that we're doing the right thing."

Mayo began using the new system in January 2005. He expects about 10% of the pre-placement reviews to require a medical exam.

Meanwhile, the nurse practitioners that once spent much of their time conducting medical exams instead will focus on health risk appraisals and health promotion.

The occupational medicine physicians will be able to spend more time working with outside clients. "It just frees us up to do more productive work," Buchta adds. ■

Supporters may push for NIOSH break from CDC

Reorganization still unsettling for NIOSH

Supporters of the National Institute for Occupational Safety and Health (NIOSH) are continuing their push to protect its independence and stature.

Although Congress effectively halted a reorganization of NIOSH that would have affected NIOSH's status within the Centers for Disease Control and Prevention (CDC), NIOSH supporters remain concerned about its future and may ask Congress to consider whether NIOSH should be moved, perhaps under the National Institutes of Health.

The CDC reorganization would have placed NIOSH within the Center for Environmental and Occupational Health and Injury Prevention. Report language in the fiscal year 2005 spending bill directs CDC "to make no changes to NIOSH's current operating procedures and organizational structure and ensure that no funds or personnel will be transferred from NIOSH to other components of CDC by means other than traditional reprogramming of funds." The report language is nonbinding, and the spending bill only applies until Oct. 1, 2005.

CDC director **Julie L. Gerberding**, MD, MPH, will continue to honor that directive, according to spokeswoman **Kathy Harben**.

"The congressional language was very clear. We have complied with it, and we will continue to do so," Harben says.

To further signal its support for NIOSH, Congress approved $287.7 million for the institute, an increase over the administration's budget request.

"This is one of the few occasions where all the stakeholders agree on something," says **Frank A. White**, vice president of ORC Worldwide, a Washington, DC-based firm that specializes in occupational safety and health consulting for large corporations.

NIOSH has built support over the past five to seven years as it worked to address the needs of

business, labor, and academia, White says.

"They've really done a good job of having a balanced, thoughtful, useful research agenda," he says. "Industry sees that this kind of reorganization has the potential to chip away at NIOSH's independence, and NIOSH's ability to work effectively and, at the end of the day, NIOSH's ability to carry out its statutory mission."

The strong endorsements of NIOSH carry political weight. "That [congressional action] indicates there is very strong bipartisan support for NIOSH within the Congress," says **Sharon Morris**, assistant chair for community outreach in the Department of Environmental and Occupational Health Sciences at the University of Washington in Seattle. Morris has served as a legislative officer for NIOSH and on its board of scientific counselors.

"I have never in all of those years seen such widespread, bipartisan, labor and management, and academic support for NIOSH," she says. "It seems a shame to me that NIOSH can't take advantage of that and move forward and do what it was mandated to do by Congress."

Last year, Gerberding announced the Futures Initiative, a reorganization that she said would position the agency to face the challenges of the 21st century: preparedness against infectious, environmental, and terrorist threats and health promotion and prevention of disease, injury, and disability. In the plan, NIOSH became part of the Coordinating Center for Environmental Health, Injury Prevention and Occupational Health, which includes the National Center for Environmental Health/Agency for Toxic Substances and Disease Registry and the National Center for Injury Prevention and Control. Gerberding touted the new synergy of these centers.

"The agency needed to be better connected on overarching issues," explains Harben.

But for NIOSH supporters, the change meant a loss of status and visibility. NIOSH was created in 1970 by the Occupational Safety and Health Act to be the research counterpart to the Occupational Safety and Health Administration (OSHA), and despite its position as a part of CDC, it maintained a measure of independence. But with the reorganization, the director of NIOSH would report to the Coordinating Center's director, not to Gerberding.

The NIOSH perspective is unique and could get lost in the larger CDC mission, worries **Aaron Trippler**, director of governmental affairs for the American Industrial Hygiene Association in Fairfax, VA.

CE *questions*

9. When the National Advisory Committee on Ergonomics completed its work, its recommendations primarily addressed:
   A. potential enforcement activity
   B. the definition of musculoskeletal disorders
   C. development of industry-specific guidelines
   D. opportunities to share best practices

10. At the Dartmouth-Hitchcock Medical Center in Lebanon, NH, who conducts the annual fit-testing?
   A. safety and environmental programs
   B. clinical respiratory program administrators on the units
   C. nurse managers on the units
   D. employee health

11. William Buchta, MD, MPH, medical director of the employee health/occupational medicine program at the Mayo Clinic in Rochester, MN, estimates that in a new pre-placement process that relies on a questionnaire, what percentage of new hires will need a medical exam?
   A. 10%
   B. 25%
   C. 40%
   D. They all will receive the exam.

12. Supporters of the National Institute for Occupational Safety and Health oppose its reorganization within CDC because:
   A. It no longer would focus on worker safety.
   B. It would have less stature and independence.
   C. It would lose employees and funds.
   D. It would have to move all its offices to Atlanta.

Answer Key: 9. D; 10. B; 11. A; 12. B

CE 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 certificate of completion. ■

Congress expresses its support for NIOSH

The U.S. Senate placed this wording in the report that accompanied the FY 2005 Omnibus Spending Bill:

The committee expects the Centers for Disease Control and Prevention (CDC) to ensure that the ongoing CDC reorganization does not impede nor diminish the National Institute for Occupational Safety and Health's (NIOSH) ability to meet its statutory responsibilities to protect the safety and health of America's workers. The committee believes that NIOSH must have the stature necessary to work effectively with the Occupational Safety and Health Administration, the Department of Labor, and the Department of Health and Human Services in the manner described by statute. Therefore, the committee directs the CDC to maintain the status quo with respect to the direct reporting relationship of the NIOSH director to the CDC director. ■

"Since 9-11, we believe the focus and responsibility of CDC has increased tremendously, but that responsibility is more focused on public health," he says. "NIOSH is the only agency in the federal government that is actually doing research on occupational health. With CDC spending more of its resources on public health, we're concerned that NIOSH would lose its focus."

For example, NIOSH supporters have noted that the coordinating center does not include the word "safety," a common part of the nomenclature for organizations in the occupational safety and health arena. The new CDC calendar has no photos relating to occupational safety and health and excludes Workers Memorial Day, they say.

On a more pragmatic note, they worry about the millions of dollars NIOSH contributes to the infrastructure of CDC. NIOSH's primary sites are in Cincinnati; Morgantown, WV; and Pittsburgh; and it is based in Washington, DC, while the CDC is based in Atlanta.

Gerberding tried to ease those concerns. After an August meeting with stakeholders, she added the word "occupational" to the agency's primary goal of protection against "emerging infectious, environmental, and terrorist threats."

She stressed that the NIOSH headquarters would remain in Washington, DC, and that it would continue to "brand its products."

Gerberding said the CDC's organizational chart would include workers and employers as "customers and partners." And the NIOSH director would continue to have direct access to OSHA, the Department of Labor, and the Mine Safety and Health Administration.

Through a separate management initiative of the secretary of Health and Human Services, 14 NIOSH budget analysts now report to the financial management office in CDC. But no other positions have been altered, Harben says. NIOSH director John Howard will report directly to Gerberding, as directed by Congress.

NIOSH supporters remain wary. They say they will ask Congress to convene oversight hearings on NIOSH and the CDC reorganization, and perhaps will ask for a General Accounting Office report on the question of whether NIOSH should be moved. "Now may be the time to say, "Let's take a look at this,'" says Trippler.

NIOSH belongs in CDC, as other CDC centers conduct research that relates to the wellness and health promotion among employees, Harben says.

"NIOSH's role, which is protecting the health and safety of workers, is very much a part of CDC's mission of protecting the health and safety of all Americans," she says. ■

It's not over: Prepare for a strange flu season

This year is a wild card, and anything still could happen. First, we had a dangerous shortage of influenza vaccine, followed by many high-risk people who couldn't get or decided to forgo immunization. Fortunately, this has been a mild flu season — so far. But February and March are the

COMING IN FUTURE MONTHS

- The hazards of lateral transfers — and what to do about them
- Quick HIV results relieve post-exposure anxiety
- How to deal with vendors of ergonomic equipment
- How effective is sharps injury prevention training?
- Building a successful return-to-work program

historical peak months for influenza activity, and the large numbers of high-risk unprotected people make this a potential recipe for disaster.

Influenza vaccine shortages and delays are a recurring problem, and at some point, we inevitably will face another influenza pandemic. Are you and your hospital prepared if we run out of luck? Do you know where to turn for guidance and help? Do you know how to prevent the spread of this infectious disease? Or how to handle major staff shortages due to record absenteeism?

Thomson American Health Consultants has developed an influenza sourcebook to ensure you and your hospital are prepared for what could happen this flu season — or the next flu season.

Hospital Influenza Crisis Management provides the information you need to deal with ED overcrowding, potential liability risks, staff shortages, and infection control implications for staff and patients.

This sourcebook addresses the real threat of a potential pandemic and the proposed response and preparedness efforts that should be taken in case of such an event.

Major guidelines and recommendations for influenza immunization and treatment are included, along with recommendations for health care worker vaccination and the efficacy of and criteria for using the live attenuated influenza vaccine.

Hospital Influenza Crisis Management will offer readers continuing education credits. For information or to reserve your copy at the price of $199, call (800) 688-2421. Please reference code **64462**. ■

Go on-line for this month's *Bioterrorism Watch*

The March/April 2005 issue of *Bioterrorism Watch* can be found on-line at www.hospitalemployeehealth.com, exclusively for subscribers of *Hospital Employee Health*.

Copies of the issue will be available in HTML and PDF formats for easy reading. Just log on to print out your copy.

To take the CE test on-line, go to http://subscribers.cmeweb.com/. Each issue will test separately. If you have questions, please call customer service at (800) 688-2421. ■

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. ■

Occupational Health Assessment

Name — first name, middle initial, last name	Mayo Clinic Number	EOHS Staff Use Only
		☐ Allied Health ☐ Mayo Graduate School ☐ Mayo Graduate School of Medicine ☐ Mayo School of Health Sciences ☐ New Consultant Staff ☐ Research Services ☐ Other

The purpose of this evaluation is to screen you for communicable diseases and to determine whether you have any physical, mental, or emotional impairment that could affect your ability to perform the job that you have been offered. Whenever such impairment is identified, we will attempt to specify restrictions that may allow you to perform the job safely while still successfully performing the essential functions of the job. We also will identify certain behaviors or characteristics, which should not affect your job status but could adversely affect your future health. Thus, this evaluation is not a comprehensive medical examination to identify hidden disease or to offer medical treatment. Once you have begun your job, we encourage you to establish a relationship with a medical provider in accordance with age-appropriate guidelines and your specific needs.

I certify that the following information is true to the best of my knowledge. I understand and agree to authorize the Mayo Employee Occupational Health Service to review any information (including, but not limited to, information relating to psychiatric/psychological and alcohol and drug diagnosis and treatment, if any such information exists) of Mayo Clinic or other health care providers regarding me for purposes related to my fitness for employment. I agree to any reasonable subsequent testing or evaluation deemed necessary to determine my fitness to perform this job, and I authorize the examining provider to forward pertinent information to those who would perform such testing or evaluation. I further understand that misrepresenting facts called for above may forfeit this employment opportunity. I understand that this record will become part of my Occupational Health file.

Signature **Date of Signature — mm/dd/yyyy**

X_____ _____

EMPLOYMENT INFORMATION

Title of the job you have been offered

_____

Do you have any current disability requiring restricted activity?
☐ Yes ☐ No

If yes, state restrictions:

_____

If yes, are these restrictions:
☐ Permanent ☐ Temporary until (provide date): _____

Can you perform the essential functions of this job?
☐ Yes ☐ No ☐ Uncertain

If yes, will you require job modification to accommodate disability?
☐ Yes ☐ No ☐ Uncertain

If yes, explain:
_____

Occupation/Exposure History — List your last three positions, starting with the most recent:

	TITLE	BRIEF DESCRIPTION	DUTIES PERFORMED
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

From the following list, select ALL substances that you have been exposed to in your current or previous employment:

☐ Asbestos/silica	☐ Grease and oil	☐ Vibration	☐ Hazardous wastes	☐ Noise above 85 dB
☐ Other dusts	☐ Pesticides	☐ Blood	☐ Formaldehyde	☐ Laboratory animals
☐ Ethylene oxide/other gases	☐ Plastics	☐ Solvents/degreasers	☐ Radiation	☐ Latex
☐ Lead/mercury/cadmium	☐ Paints/isocyanates	☐ Cytotoxic agents		
☐ Metal working fluid	☐ Welding/soldering	☐ Epoxy resins		

Comments:

_____

FUNCTIONAL SELF-ASSESSMENT

1. Do you have any of the following? (Check all that apply)

☐ Loss of vision in either eye that cannot be corrected
☐ Loss of vision requiring correction
Select type of correction needed (if applicable)
☐ Near correction ☐ Contact lenses
☐ Far correction ☐ Eyeglasses
☐ Loss of hearing that requires hearing aids

2. Do you have decreased function in any of the following? (Check all that apply)
☐ Either arm/hand, including grip/reach, use of fingers
☐ Neck or lower back (such as arthritis or pinched nerve)
☐ Hips, knees, ankles, or feet

3. Do you have decreased ability in any of the following? (Check all that apply)
☐ To stay awake or maintain consciousness (due to such causes as seizures, diabetes, or sleep disorder)
☐ To breathe or maintain endurance (due to such causes as asthma, emphysema or angina)
☐ To fight off infection (due to such causes as immune deficiency or diabetes)

If you selected any of the above, provide comments:

4. Do you have physical problems (i.e., seizure disorder or diabetes) or mental/emotional problems (such as anxiety, attention deficit disorder, or claustrophobia) that could interfere with any of the following? (Check all that apply)
☐ Working in confined spaces
☐ Working at heights
☐ Working in extreme cold or heat
☐ Working with moving machinery
☐ Driving company vehicles (car, truck, or forklift)
☐ Working with soaps, detergents, or solvents
☐ Using a respirator
☐ Using latex products
☐ Working rotating shifts (nights, evenings)
☐ Working with animals
☐ Working with radiation or chemotherapy agents (due to a condition such as pregnancy)
☐ Managing multiple tasks at one time

If you selected any of the above, provide comments:

PERSONAL HISTORY

1. Are you taking any medications? ☐ Yes ☐ No
If yes, list all prescription and nonprescription medications you currently take:

2. Do you have any allergies (such as bee stings, medications, metals)? ☐ Yes ☐ No
If yes, provide list:

3. Do you use tobacco products? ☐ Yes ☐ No
If yes, list type, amount and duration:

4. Do you drink more than one (for women) or two (for men) alcoholic serving(s) on a typical day? ☐ Yes ☐ No

5. If you are an alcoholic, have you consumed alcohol within the past 6 months? ☐ Does Not Apply ☐ Yes ☐ No

6. In the past 6 months, have you used drugs illegally? ☐ Yes ☐ No

7. In the past 6 months, have you been referred to, admitted to, or discharged from a drug/alcohol rehabilitation program? ☐ Yes ☐ No

8. Do you exercise for at least 30 minutes three times weekly? ☐ Yes ☐ No

9. How long has it been since your last general medical evaluation? _____ year(s)

Source: Reprinted with permission of Mayo Clinic, Rochester, MN.