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Wake-up call: Are sleepy HCWs a danger to patients and themselves?

Joint Commission proposes fatigue goal for 2008

Reducing health care worker fatigue may be one of the most important measures you can take to improve patient safety, according to The Joint Commission (formerly the Joint Commission on Accreditation of Healthcare Organizations).

For the third year in a row, The Joint Commission in Oakbrook Terrace, IL, is considering reducing fatigue as one of the 2008 National Patient Safety Goals — the key areas that hospitals should focus on. **(See box on p. 51.)**

Fatigue already is one issue that should be considered in the root-cause analysis of "sentinel events," or serious adverse events, says **Rick Croteau**, MD, executive director of The Joint Commission's patient safety initiatives.

"We want this to be on their radar screen," he says. "We want the hospitals to identify the extent of the problem in their organization and to deal with it in whatever ways work best for them."

Other organizations have focused attention on fatigue as a cause of medical error. The American Nurses Association recently issued position statements outlining the nurses' and employers' responsibilities to ensure that nurses are not working while fatigued. ECRI, a nonprofit health services research agency in Plymouth Meeting, PA, issued a risk analysis on *Fatigue in Healthcare Workers*, largely in response to the proposed Joint Commission patient safety goal. **(See editor's note for further information.)**

In 2004, the Institute of Medicine addressed fatigue in its report, *Keeping Patients Safe: Transforming the Work Environment of Nurses*, and the Agency for Healthcare Research and Quality included limiting medical resident work hours as part of its 10 patient safety tips for hospitals. **(See related article on p. 52.)**

Fatigue is an issue that The Joint Commission will address eventually, predicts **Cynthia Wallace**, director of ECRI's risk management publications. "A proactive health care facility would say, 'If not this year, then next.'"

Preventing fatigue-related errors requires nothing less than a culture change. After all, nurses and doctors believe they can work through

fatigue and still perform well, says Croteau.

"Well, that's just plain wrong," he says. "Doctors and nurses are people and have the same weaknesses as anyone when it comes to being overtired and are just as capable of making mistakes as a result of fatigue as anyone else. It has nothing to do with commitment.

"This is essentially a safety goal that would recognize the reality and humanity of the caregivers. We can't keep ignoring this anymore," Croteau says.

Staffing and overtime schedules obviously are related to fatigue. But hospitals also may consider policies that limit the duties a health care worker can perform after a certain number of working hours, he says.

"Some tasks are more affected by fatigue than others," says Croteau. "Some of these tasks put patients at great risk than other tasks. By taking fatigue into account when duties are assigned, one can limit the impact of staff fatigue on patients."

For example, a nurse working the end of a long shift or an overtime shift could be assigned patients with lower acuity, he says.

"When health care facilities look at the issue of fatigue, it seems like an overwhelming task," he says. "[They think] 'We're already short-staffed. How do we reduce our overtime when we're already short-staffed?'

"There are little steps, strategies that can be put in place," he says. "Maybe it's just a matter of thinking creatively."

Take steps to combat fatigue

ECRI offers suggestions for reducing the negative effects of health care worker fatigue. **(See box on p. 52.)** For example, bright lighting can help employees combat fatigue and readjust their circadian rhythm, which can be affected by changing from day to night shifts.

Shift changes should move forward with the clock — from day to night, for example — to follow the natural flow of the circadian rhythm.

Hospital policy also should enable employees to speak up when they feel fatigue threatens to impact their performance, says Wallace. "It's [a matter of] creating a culture where working long hours isn't a sign of dedication," she says. "You recognize that it can be risky."

Nurses need to be educated about fatigue and its impact, both in hospital-based safety training and in the nursing school curriculum, says **Cynthia Haney**, JD, senior policy fellow at the American Nurses Association in Washington, DC.

"I think a lot of health professionals really push themselves beyond their limits," she says. "They'll habitually neglect to take meals and rest breaks and often don't even realize that they are not performing as well as they think they are."

If an employee seems habitually fatigued but isn't working long or rotating shifts, the employee may need a referral to the employee assistance program, says Haney.

The employee may have a sick child at home, or may suffer from chronic fatigue or sleep apnea. While you can't pry into medical or private issues,

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Proposed National Patient Safety Goal

Health Care Worker Fatigue

Goal 18

Prevent patient harm associated with health care worker fatigue.

Requirement 18A

The organization identifies conditions and practices that may contribute to health care worker fatigue, acknowledges that fatigue poses a risk to patient safety, and takes action to minimize that risk.

Rationale for Requirement 18A

Health care worker fatigue poses a serious threat to patient safety. Multiple studies have suggested a correlation between health care worker fatigue and serious medical errors. Two sources of error-inducing fatigue have emerged in the literature: Prolonged on-duty periods, and work schedules that disrupt normal circadian rhythms and sleep physiology. The risk for error by nurses who work shifts longer than 12 hours has been reported to increase by two to three times. Similar error risk was seen in nurses who work rotating and variable shift work. Another prospective, randomized study reported a 35.9% increase in the commission of actual medical errors by medical interns on duty for longer than 24 hours. Medical residents who work more than 80 hours per week reported committing more than 50% more errors than those who worked fewer than 80 hours per week. The effect of sleep deprivation on cognitive function and reaction time, two critical areas of human performance, is further demonstrated by fact that 24 hours awake has been shown to create similar impairment to a blood alcohol level of 0.1%.

Implementation Expectations for Requirement 18A

1. The organization identifies fatigue as an unacceptable risk to patient care.

2. The organization identifies tasks affected by levels of fatigue.

3. The organization takes action to minimize the impact of fatigue on patient safety including consideration of the following:

• Scheduling work hours and on-call periods to minimize fatigue.

• Limiting working hours.

• Identifying any tasks that may no longer be performed by individuals after extended duty hours or assessed to be at a performance-degrading level of fatigue.

• Implement annual "Fatigue Training" to provide up-to-date guidance on performance degradations that occur due to fatigue, and interventions that can reduce the potential for harm to patients.

Recommended reading

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• Williamson AM, Feyer A. Moderate sleep deprivation produces impairments in cognitive and motor performance equivalent to legally prescribed levels of alcohol intoxication. *Occup Environ Med* 2000; 57:649-655. ■

you can offer resources and respond to concerns about job performance, says Haney. "There are issues involving health care worker fatigue that are beyond the scope of the hospital," she notes.

The ANA focused one position paper on the personal responsibility that nurses have to reduce the dangers to patient safety created by fatigue — which may mean refusing to work overtime that would affect performance and limiting outside jobs that may contribute to fatigue. The ANA also issued a position statement on *Assuring Patient Safety: The Employers' Role in Promoting Healthy Nursing Work Hours in All Roles and Settings*, which emphasizes that employers should provide schedules and staffing levels that enable nurses to get the rest they need. That includes adequate compensation so nurses don't feel compelled to work overtime or extra shifts, the ANA says.

"We can't consider either of these position statements alone," Haney says. "The responsibility is shared."

Fatigue may lead to liability

Meanwhile, the pressure may build for hospitals to address the issue of fatigue. Some state

legislatures have addressed mandatory overtime. But with a closer look at staffing and scheduling, the issue of fatigue may gain greater scrutiny as well, says Wallace.

"Once the public sees the potential for medical errors and their own safety to be tied into health care worker fatigue, I think the issue will be very visible to the public, too," she says.

In 2004, the IOM cited fatigue among nurses as a contributing factor in medical errors. The IOM panel recommended that "state regulatory bodies" should prohibit nurses from working more than 12 hours within a 24-hour period or more than 60 hours in a week.

There are liability issues as well. Risk managers need to aware of fatigue as a cause of medical errors and employee injuries. It also can be a contributing factor if an employee has a car accident while commuting home from an extended shift.

While some hospitals may balk at hiring additional staff to reduce working hours, they need to balance the financial implications – and patient safety consequences — of inadequate staffing, says Croteau.

"There is a lot of evidence in the literature that fatigue leads to more errors. That in itself has a cost," he says.

With its position statements on fatigue, ANA plans to build awareness on the issue, says Haney. "We really hope to widen the discussion beyond the nursing community. We're just at the beginning of really stepping up our efforts on this issue."

(Editor's note: Further information on health care worker fatigue is available from the following web sites: ECRI Fatigue in Healthcare Workers risk analysis: www.ecri.org/Patient_Information/Patient_Safety/Empl14.pdf. American Nurses Association position statements on fatigue: www.ana.org. The Institute of Medicine report, Keeping Patients Safe: Transforming the Work Environment of Nurses, *is available at www.nap.edu/catalog. php?record_id=10851.)* ■

Consider safer practices that reduce fatigue

Here are some steps identified by ECRI that hospitals can take to reduce fatigue and its impact on patient safety:

• Reform work practices.

—Promote attitudes toward work that recognize that working while exhausted poses an unacceptable risk. It should not be viewed as a sign of dedication.

— Consider establishing part-time residencies and job shares for trainees who are willing to extend the length of their residencies.

• Conduct an anonymous worker survey to assess the views of the work force on fatigue, scheduling, and related issues.

— Use technology (e.g., computerized sign-out and medication orders) to increase continuity of care and reduce errors.

• Keep abreast of the status of state and federal regulations relevant to health care workers' duty hours and mandatory overtime limitations.

• Comply with duty-hours restrictions.

— Ensure that medical residents adhere to ACGME standards for duty hours.

— Ensure that nurses adhere to state regulations for duty hours, where applicable.

• Adjust scheduling policies.

— Review current scheduling policies and practices and compare them to the limits in proposed federal regulations and state regulations, as applicable.

— Work with unions, if applicable, and worker groups to develop new schedules. Whenever possible, schedule duty periods to account for the known effects of sleep physiology.

• Consider implementing facility policies to limit the number of continuous duty hours for nurses.

• Educate health care workers about fatigue and its effects on patient safety and on their own personal safety. ■

Residency programs open eyes to sleep deprivation

Duty hours rules may face more changes

Grueling schedules and sleep deprivation long have been hallmarks of medical residency. But with a growing number of studies linking sleep deprivation to medical errors and worker injuries, pressure is building to rethink the method of medical education.

The Joint Commission is considering adding a National Patient Safety Goal on health care worker fatigue, which would include medical residents. **(See related article on cover page.)** Based on research it sponsored, the federal Agency for Healthcare Research and Quality addresses resident work hours in two of 10 patient safety tips: It

advises hospitals to "limit shifts of more than 24 hours for medical residents" and "eliminate the tradition of shifts of more than 30 consecutive hours by interns working in hospital ICUs."

"It's a grave issue," says **Charles Czeisler**, PhD, MD, director of the Division of Sleep Medicine at Harvard Medical School and chief of the Division of Sleep Medicine at Brigham and Women's Hospital in Boston.

"One out of five interns reports to us that [while] working these schedules, they have made a fatigue-related mistake that has seriously injured a patient in the previous year. One out of 20 has reported to us that they made a fatigue-related mistake that resulted in the death of a patient.

"That means that tens of thousands of patients have been seriously injured and thousands have been killed" due to sleep deprivation of medical residents, Czeisler says.

Currently, the American Council for Graduate Medical Education (ACGME) in Chicago limits resident work hours to 24 hours plus six additional hours for paperwork and other nonclinical tasks. Residents may not work more than 80 hours a week, averaged over a four-week period, according to ACGME standards. New York is the only state to restrict resident work hours by law, with rules that limit resident shifts to 24 hours plus three additional nonclinical hours.

Specialty groups, such as the American College of Surgeons, have expressed concern that work hour restrictions would cut the training of young surgeons. Questions also have been raised about continuity of care and the impact of residents who "time out" and must leave care in the hands of a resident unfamiliar with their patients.

ACGME is continuing to look at changes in resident scheduling and work hours, says **Ingrid Philibert**, MHA, MBA, ACGME senior vice president for field activities. Limits on work hours must be balanced with other considerations, she says.

"Residents have to have continuous exposure to a given patient to see how the patient progresses," she says. "It's very hard to learn that through short snippets of exposure to different patients."

Others favor some absolute limits. Even a 24-hour shift is dangerously long, contends **Peter Lurie**, MD, deputy director of the Health Research Group of Public Citizen in Washington, DC. Studies show that staying awake for 24 or more hours results in performance deficits similar to having a 0.1 blood alcohol level — beyond the limit for driving under the influence.[1] "It's antithetical to quality of patient care," he says.

Fixing the problem of resident work hours requires a restructuring of schedules — and money to add more resources. It can be costly to hire additional nurse practitioners and physician assistants or other support staff to take over some duties from residents. Teaching hospitals typically have patients with high acuity — often patients who do not have health insurance — and they run on thin margins, says Philibert.

Yet Czeisler notes that teaching hospitals receive funds specifically to cover to supervision and educational support of residents. Patients and their insurance companies are billed for the clinical care. "They're provided enough money through the Medicare program to hire fully trained physicians to supervise those trainees and for them to work reasonable hours," he says. "With the money they get from the clinical care of those patients, they can provide for their clinical care, just as do hospitals that don't have interns and residents."

Shorter hours lead to fewer errors

It seems like common sense that chronic sleep deprivation can affect performance. That is the basis for work shift limits in the trucking and airline industries. But recent studies have highlighted specific risks in health care.

Residents who worked extended shifts of 24 hours or more were more than twice as likely to have car accidents on the way home from work and almost six times as likely to have a near-miss, according to the Harvard Work Hours, Health, and Safety study.[2]

Percutaneous injuries were 73% more frequent among resident working extended work hours (at least 24 hours) than those with nonextended shifts. Residents cited lapses in concentration and fatigue as the primary contributing factors.[3]

Even more troubling, a survey of medical residents found that they reported significantly more serious medical errors after working extended shifts. Those who reported working more than five extended (24-hour) shifts in a month also were seven times more likely to report a fatigue-related serious medical error.[4]

Conversely, reducing interns' work hours led to a 36% reduction in medical errors, Czeisler and his colleagues found. Schedules were redesigned at Brigham and Women's Hospital in Boston,

splitting the interns' on-call shifts to "day call" and "night call." The schedule was designed for 16-hour shifts and, although the interns sometimes exceeded that, they eliminated shifts of 24 hours or more and reduced overall hours from about 80 per week to about 63 per week.[5]

To improve continuity, the interns' schedules overlapped by an hour and the interns completed a sign-out form on each patient. To collect information on errors, two nurses reviewed medical charts and six physicians observed interns.

Schedules must be carefully designed to reduce errors, notes Czeisler. For example, Brigham and Women's decided not to use "night float" residents who would not be familiar with the patients.

Czeisler also notes that there are psychological repercussions for interns and residents who make serious medical errors due to fatigue. "These are very caring individuals who have gone in with a lot of enthusiasm and dedication," he says. "They're working themselves to the bone to try to do the best job they can, but they're subjected to schedules that the brain can't properly perform."

ACGME: Most programs comply

The ACGME contends that its standards have worked to reduce resident work hours, and that few programs are substantially out of compliance. In 2004-2005, the ACGME cited 7% of programs for violating duty hours standards. Those are hospitals in which more than 15% of residents report violations of duty hours.

Some violations of the duty hours requirement occur because individual residents overstay their shift to finish up work or to observe an interesting case, says Philibert.

"In each program there probably are a few residents who run over the duty hours on a regular basis," she says. "This should be of interest to directors who may want to help them with time management. We would be unnecessarily obtrusive if we cited programs if they had one or two residents over."

Do residents lie to cover up their extended work hours so their programs won't be cited? "We are aware that residents in some surgical specialties lie on their duty hour reports to ACGME," says Philibert. "It's a professionalism issue." ACGME addresses those situations with program directors, she says. "We want the data to be accurate. We don't want it to be whitewashed and for us just to look compliant."

Czeisler contends that, based on his research, compliance is far less than what is reported to ACGME. "It's not an isolated incident. It's 60% of the months, 85% of the interns reporting violations," he says.

There is one area of concord on the issue of work hours: The ACGME is reviewing different scheduling structures, including the shorter shifts implemented at Brigham and Women's Hospital as a part of the ICU study.

"We are still exploring the effect of our putting in these [duty hours] standards," says Philibert. "We are still open to future refinements. We think of the duty hour limits as one of a whole host of standards that make for good patient care."

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ADA may require lifts for injured RNs

Lifts may be 'reasonable accommodation'

If your hospital doesn't supply lift equipment to prevent back injuries, you may be purchasing them after injuries occur — as an accommodation under the Americans with Disabilities Act (ADA).

The Equal Employment Opportunity Commission (EEOC) has issued guidance on the ADA that is specifically geared toward health care. It cites examples based on previous court cases that have implications for how hospitals address patient handling needs.

For example, the EEOC says patient lifting might not be an "essential function" of a nurse's job, even if it is in the nurse's job description:

"[L]ifting patients will not be considered an

Are you the employer of temp workers?

For the purposes of the Americans with Disabilities Act (ADA), hospitals may be considered the employer or joint employer of temporary or contracted workers — and may be required to provide accommodations.

Guidance from the Equal Employment Opportunity Commission (EEOC) states that "whether a particular health care worker is an 'employee' covered by the ADA is a fact-based and case-specific determination that depends on a variety of factors."

Even if an outside firm pays the employee, the hospital may have joint responsibility to provide accommodations for an employee under the ADA, says **Jeanne Goldberg**, senior attorney advisor in the EEOC's Office of Legal Counsel.

She offers some questions to consider: "Does the hospital control the work that they do and how it gets done? Is there a continuing relationship as opposed to just coming to work to get one task done? Does the hospital have a right to assign additional projects to the worker? Does the hospital set the hours of work and how long the job is going to take?"

Both the outside client and the hospital may have "the right to control the means and manner" of the employee's work performance, says Goldberg. "When that is the case, if the individual believes they've been discriminated against, they could file an EEOC charge against both the staffing firm and the hospital as joint employers," she says. ■

essential function of the position if a registered nurse in that hospital typically spends only minutes per day repositioning patients in their beds, or transferring patients between beds and gurneys or into and out of wheelchairs, and if it is nearly always accomplished in this hospital by two people because the hospital employs orderlies, licensed practical nurses, and nurse's aides whose duties are to assist registered nurses in all patient care activities, including the lifting and transferring of patients."

The EEOC also gives an example of a nursing assistant who injures her back and has a permanent 10-pound lifting restriction. Lifting is an essential function of her job — but the employer must accommodate her restriction:

"She informs her supervisor that she can nevertheless perform all of her duties except for lifting patients, which is an essential function of her position. She requests that the hospital purchase a portable mechanical patient lifting device as an accommodation that would permit her to perform this function. The hospital administrator learns that the hospital can acquire the device for approximately $1,500. The administrator also consults with the hospital occupational health and safety officer who informs the administrator that the device can be used safely and appropriately to perform this employee's duties, and that training in using the device properly will be necessary. Purchase of the device and the cost of the associated training would not pose an undue hardship."

ADA does not require 'undue hardship'

The EEOC issued ADA guidance for health care because of the large employee population and unique aspects of the industry, says **Jeanne Goldberg**, senior attorney advisor in the EEOC's Office of Legal Counsel. "It's very helpful for employers to see how the rules specifically apply in common situations," she says.

While patient handling presents similar challenges in hospitals, the tasks may be handled in by a variety of employees. "The ADA never requires an employer to eliminate an essential function of a job as an accommodation," Goldberg says.

A court would look at the specifics of how a job was performed in the hospital to determine if lifting is an essential function, she says.

"If it's not an essential function, then the employer may need to excuse the employee from performing it as an accommodation, if it's not an undue hardship. An employer doesn't have to provide any accommodation that's too expensive or disruptive," she says.

However, Goldberg also notes that more hospitals are beginning to purchase lift equipment. "The message here is simply for employers to know — as well as employees in the health care field – that this may be a reasonable accommodation," she says. "It has to be considered where you have someone with a lifting restriction."

The EEOC guidance adds to the momentum that's building for safe patient handling, says **Bill Borwegen**, MPH, occupational safety and health director for the Service Employees International Union (SEIU). "This is further impetus for employers to adopt comprehensive safe patient handling programs," he says.

Still, it's clearly better to prevent patient handling injuries than to create accommodations after an

injury occurs. Injured nurses also may not have the stamina or financial resources to pursue an ADA claim, notes **Anne Hudson**, RN, a back-injured nurse from Coos Bay, OR, who formed the Work Injured Nurses' Group (WING USA).

"I went to court twice [for a determination that the injury was work-related]," she says. "Every decision in my favor was appealed by the hospital. I had to go back through the system multiple times in order to prevail."

Hudson did not pursue an ADA claim and now works in public health nursing. The EEOC guidance sends an important message, she says, but "great barriers remain to implementation."

(Editor's note: The EEOC's "Questions and Answers about Health Care Workers and the Americans with Disabilities Act" is available at www.eeoc.gov/facts/health_care_workers.html.) ■

OSHA may cite for failure to use rapid HIV testing

Perform test 'as soon as feasible'

Hospitals face possible citation for failing to use a rapid HIV test after a bloodborne pathogen exposure, according to a letter of interpretation by the U.S. Occupational Safety and Health Administration.

The standard states that "[t]he source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity." That means that "an employer's failure to use rapid HIV antibody testing . . .would usually be considered a violation of that provision," according to **Richard Fairfax**, director of OSHA's Directorate of Enforcement Programs.

In the past five years, OSHA has issued 31 citations for failing to comply with that provision. That would include situations in which hospitals did not act quickly enough to obtain source patient consent.

Katherine West, BSN, MSEd, CIC, an infection control consultant with Infection Control/Emerging Concepts in Manassas, VA, raised the question after she noticed that many hospitals around the country were not using the rapid tests, which are readily available and cost about $10 to $20 per test.

"I was finding that there were medical facilities all over the country who stated they would not do rapid HIV testing at all," she says. "Some would do it for their employees but not for non-hospital [workers], like an exposure that occurred in doctors' offices or among EMS [emergency medical services] responders. There was a resistance, and I couldn't understand it."

West notes that guidelines from the Centers for Disease Control and Prevention in Atlanta state that post-exposure testing "should be performed as soon as possible. . . . An FDA-approved rapid HIV-antibody test should be considered for use in this situation, particularly if testing by EIA cannot be completed within 24-48 hours."[1] Under the bloodborne pathogens standard, OSHA requires employers to comply with current CDC guidelines.

Furthermore, several of the rapid tests have Clinical Laboratory Improvement Act (CLIA) waivers, which means they can be used even if the lab is not CLIA-certified, says West.

Tests spare HCWs tremendous anxiety

The rapid tests spare employees tremendous anxiety as well as the need to take a regimen of toxic drugs, notes West. "People are worried for weeks when we could bring this to closure in one hour," she says.

Hospitals also benefit, she says. "Doing this is good risk management for the medical facility. It's cost-effective because it's cheaper to do rapid testing than put people on expensive drugs."

West acknowledges that in some states, consent laws regarding HIV testing may cause some delays in testing source patients. The CDC recently recommended routine HIV testing of patients.[2] Employee health professionals also may want to contact their legislators to get outdated laws changed, West advises.

As of press time for *Hospital Employee Health*, OSHA had not posted the interpretation letter on its web site. West is trying to get the word out. "I look at this as a really, really positive step for health care workers," she says.

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CA proposes biannual fit-testing for HCWs

Draft targets airborne diseases

Once again, a trendsetter in occupational health, California has created a draft standard on aerosol transmissible diseases that would allow biannual fit-testing of N95-filtering facepiece respirators until at least 2012 but would require the use of powered air purifying respirators (PAPRs) during high-hazard procedures.

Modeled after the bloodborne pathogen standard, the draft aerosol transmissible diseases standard calls for employers to maintain an exposure control plan that would outline source control measures, procedures for identifying suspect or confirmed cases, medical surveillance, communication with employees, training, and response to exposures.

Employers also would need to include information in the exposure control plan about how they would ensure an adequate supply of personal protective equipment.

The draft standard was designed to be flexible and applicable to various workplaces, from health care to homeless shelters. "It gives employers a way to tailor the control measures to the environment they're working in and also to their resources," says **Deborah Gold**, MPH, CIH, senior safety engineer with Cal-OSHA.

The standard still is under review. When it is formally proposed, Cal-OSHA will receive comments during a 45-day period and the standards board will hold public hearings. So far, more than 100 people have participated in advisory committee process, including major organizations such as the California Nurses Association, the Service Employees International Union, and the California Hospital Association.

The draft standard grew out of concerns about respiratory protection, particularly after the U.S. Occupational Safety and Health Administration withdrew its tuberculosis standard in 2003, Gold says. That made health care employers subject to the general industry respiratory protection standard and its annual fit-testing rule.

Severe acute respiratory syndrome (SARS) heightened the awareness of airborne infectious disease risk to health care workers; 1,707 health care workers became ill from SARS worldwide, representing 21% of all cases, according to the World Health Organization.[1] "Employees and employers in health care started wondering, 'How are we going to control these emerging infections?'" says Gold.

In planning for pandemic influenza, once again issues of respiratory protection are at the forefront. "There's been a push to do something on this issue," she says. "We don't want to write a new standard whenever a new pathogen comes out."

Cal-OSHA has been enforcing the annual fit-testing rule — using state funds because of a Congressional prohibition on using federal funds for fit-testing enforcement. But the temporary biannual rule is designed to reduce the burden until there is further information from research on fit-testing by the National Institute for Occupational Safety and Health.

"This is the compromise that came out of advisory meetings," says Gold, although she acknowledges, "This could be challenged in rule-making."

The draft standard also requires employers to review and update their respiratory protection program annually and to provide annual training to employees. The result is an increased focus on respiratory protection and airborne infectious diseases overall, Gold says.

Reference

1. World Health Organization. Summary of probable SARS cases with onset of illness from 1 November 2002 to 31 July 2003. 2003 Sep 26 [cited 2007 Mar 21]. Available from www.who.int/csr/sars/country/table2003_09_23/en/. ■

Joint Commission studies hand hygiene compliance

Experts seek best way to monitor HCWs

The Joint Commission wants you to measure compliance with hand hygiene. But if you feel unsure about the best way to do that, you're not alone. Even hand hygiene experts are struggling with how to monitor hand hygiene.

The Joint Commission in Oakbrook Terrace, IL, has convened an expert panel and plans to issue a monograph on monitoring hand hygiene in early 2008.

"There's a lack of consensus on how to measure hand hygiene compliance," says **Linda Kusek**, RN, MPH, associate project director of the Joint Commission's Division of Research. "This

has made it difficult for everyone to actually determine the effectiveness of their hand hygiene program."

Yet hospitals are required to monitor compliance. One of the Joint Commission's National Patient Safety Goals calls for hospitals to comply with the hand hygiene guidelines of the Centers for Disease Control and Prevention. CDC specifically recommends monitoring the "number of hand-hygiene episodes performed by personnel" compared to the "number of hand-hygiene opportunities, by ward or by service" and providing feedback to employees about their performance. It also recommends monitoring the volume of alcohol-based hand rub or soap used per 1,000 patient-days.[1] **(See box, below.)**

To "monitor the episodes," many hospitals conduct periodic observation. This has its drawbacks, notes **Elaine Larson**, PhD, RN, associate dean for research at the Columbia School of Nursing in New York City.

"The problem with observation is that it's exceedingly expensive," she says. "It's also disruptive and there are issues of privacy. It also changes behavior. If you know you're being watched, you may change your behavior."

Some facilities place electronic counters in the soap or alcohol-based gel containers. It registers every time someone takes a squirt.

The problem: "You don't know who did it," says Larson. "If you wanted to do some kind of intervention to improve practice, you don't know who needs the intervention."

Measuring how much gel is used also poses

CDC: Monitor hand-hygiene episodes, volume of gel

The Centers for Disease Control and Prevention calls for the following monitoring of hand hygiene:

• Periodically monitor and record adherence as the number of hand-hygiene episodes performed by personnel/number of hand-hygiene opportunities, by ward or by service. Provide feedback to personnel regarding their performance.

• Monitor the volume of alcohol-based hand rub (or detergent used for handwashing or hand antisepsis) used per 1,000 patient-days.

• Monitor adherence to policies dealing with wearing of artificial nails.

• When outbreaks of infection occur, assess the adequacy of health care worker hand hygiene. ■

CNE *questions*

17. Beyond scheduling and staffing, what other policy can address fatigue during a long shift at hospitals, according to Rick Croteau, MD?
A. Pairing nurses with a nurse-intern.
B. Providing energy drinks and additional breaks.
C. Limiting duties at the end of a long shift.
D. Requiring nurses to report their nighttime sleep hours.

18. What is the maximum number of hours allowed in a single shift for medical residents, according to the American Council for Graduate Medical Education (ACGME) in Chicago?
A. 16
B. 24
C. 30
D. 36

19. According to the Equal Employment Opportunity Commission, a hospital may need to purchase a lift as an accommodation for an employee with a lifting restriction if:
A. it is not an undue hardship.
B. it is not an essential function.
C. it is needed for patient care.
D. it is related to a work-related injury.

20. According to a letter of interpretation issued by the U.S. Occupational Safety and Health Administration, failure to use a rapid HIV test after an exposure may result in a citation because:
A. rapid tests are considered the best practice.
B. exposure testing must occur "as soon as feasible."
C. the bloodborne pathogens standard requires rapid tests.
D. Rapid HIV tests are not required by OSHA.

Answer Key: 17. C; 18. C; 19. A; 20. B.

CNE instructions

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

difficulties. To make gel use convenient, many hospitals give health care workers small containers to carry in their pockets. They may take them home and use them at other times.

If you measure product use to determine hand hygiene, you also need to keep track of patient load, notes Larson. You would expect fewer hand hygiene episodes on days of lower patient population.

The Joint Commission's hand hygiene monograph is being developed with other organizations: the Association for Professionals in Infection Control and Epidemiology (APIC), the Centers for Disease Control and Prevention (CDC), the Society for Healthcare Epidemiology of America (SHEA), the World Health Organization (WHO) World Alliance for Patient Safety, the Institute for Healthcare Improvement (IHI), and the National Foundation for Infectious Diseases (NFID).

For now, hospital employee health and infection control professionals should use their best judgment about how to monitor hand hygiene.

"We do ask them how you go about monitoring hand hygiene and the surveyors will look at the data they've collected," says Kusek. "They'll also look at the issues the organization has identified as a result of that process to see if they've taken the next step to improve compliance."

Reference

1. Centers for Disease Control and Prevention. Guideline for hand hygiene in healthcare settings. *MMWR* 2002; 51 (RR16):1-44. ■

Expect delays in flu vaccine delivery

Slow pace of distribution is normal

If you were frustrated by the slow delivery of influenza vaccine last fall, public health officials have a message for you: Get used to it.

Gone are the days when hospitals received all their vaccine in one shipment and began vaccinating in late September. Flu vaccine manufacturers are making more vaccine than ever before — but they release the vaccine gradually, as it is ready.

The Centers for Disease Control and Prevention is now recommending that hospitals and other providers begin vaccinating as soon as they get vaccine, but continue their vaccinations through January.

"There are capacity issues about how many doses can be produced," says **Greg Wallace**, MD, MS, MPH, chief of the CDC's Vaccine Supply and Assurance Branch. "Even [a delay of] two or three weeks can cause a lot of logistical nightmares."

About 130 million doses will likely be available for the next flu season, according to manufacturer projections. That is significantly more than the 100 million distributed in the past flu season.

The rapid growth in vaccine production creates challenges for distribution, notes Wallace. "Even if you go back as few as 10 years ago, it was a much smaller system," he says. "There are a lot more complexities now."

Many health care providers were upset last fall when they had only partial delivery of their vaccine supply but area retailers, such as Wal-Mart, were offering mass vaccination campaigns. In fact, all vaccine purchasers received a portion of their order, says Wallace.

"By the end of September, providers had 40% of what was out there. They had their fair share," he says.

Hospitals should schedule vaccination clinics in October, but continue vaccination efforts through November, December, and even January. "Use what you have. There's more coming," Wallace says. ■

OSHA warns 56 high-hazard hospitals via letter

Fifty-six hospitals were among the 14,000 employers that received letters from the U.S. Occupational Safety and Health Administration

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cautioning them about above-average injury and illness rates.

OSHA identified the workplaces from the 2006 survey of 80,000 employers. Employers received the letters if they had 5.3 or more injuries or illnesses that resulted in days away from work, restricted work activity, or job transfer (DART) for every 100 full-time workers. The national average was 2.4 such illnesses and injuries for every 100 workers.

The list of high-hazard workplaces does not include sites in the 21 states that run their own OSHA-compliant programs. OSHA will issue a separate list later this year designating workplaces that are being targeted for comprehensive inspections because of high injury and illness rates. ■

CNE objectives

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

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