Occupational Health Management™

A monthly advisory for occupational health programs

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INSIDE

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JANUARY 2008
VOL. 18, NO. 1 • (pages 1-12)

The risk of a second heart attack doubles for those with chronic job stress

Do a better job of reaching out to workers with burnout

When an employee returns to work after a heart attack, chronic job stress doubles their risk for another coronary heart disease event, according to a recent study.[1]

After 972 men and women, aged 35 to 59 years, came back to work after a heart attack, researchers performed follow-up at regular intervals between February 1996 and June 2005. Patients were first interviewed about six weeks after their return to work, then two years and six years later. During the last follow-up, researchers found that 206 employees had a confirmed recurrent coronary heart disease event, including 13 deaths. Chronic job strain (defined as high psychological demands and low decision control) was linked with a twofold increased risk in these workers.

To make the problem even more challenging, workers with burnout are less likely to participate in stress reduction or occupational training and are at risk for taking inappropriate antidepressants, says another study.[2] Researchers surveyed 3,276 Finnish employees aged 30 to 64 about burnout (defined as exhaustion accompanied by feelings of incompetence or that one's work isn't valuable). They found that 25% had mild burnout symptoms, and 2.4% had severe burnout.

Workers with severe burnout were about 40% less likely to participate in work practice improvement, occupational training, stress reduction, or vocational rehabilitation programs. However, these workers were *more*

EXECUTIVE SUMMARY

Chronic job stress doubles the risk of a second coronary heart disease event for employees who return to work after a heart attack. Employees with burnout are less likely to participate in stress reduction programs and are at risk for inappropriate use of antidepressants. To help workers manage stress and burnout:

- Identify the root cause of the problem.
- Don't require workers to attend self-help classes.
- Screen workers for depression and anxiety.

likely to take medications for mental health problems, with increased rates of antidepressant use even after adjustment for the presence of depression and anxiety.

This data suggests that in some cases, burnout has been misinterpreted as a mental disorder requiring medications, says **Kirsi Ahola**, the study's author and a researcher at the Finnish Institute of Occupational Health in Helsinki. "Especially when they have no contact with the patient's workplace, doctors may feel medications are the only help they can offer," says Ahola.

In fact, the most effective interventions for workers with burnout combine individual and occupational approaches, says Ahola. "Successful recovery from burnout includes accommodations and activities to restore health and support," she says. "Occupational health professionals can suggest workplace modifications based on scientific evidence." Examples of these modifications are clarified responsibilities, reassigned tasks, increased flexibility and supervisory support, and training, says Ahola. Encourage workers to actively communicate with supervisors about the new work arrangements, advises Ahola. "If necessary, additional support for these discussions from occupational health professionals should be considered," she says. "A follow-up should also be arranged to ensure successful recovery."

Occupational Health Management™ (ISSN# 1082-5339) is published monthly by AHC Media LLC, 3525 Piedmont Road, Building Six, Piedmont Center, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodical postage paid at Atlanta, GA 30304. POSTMASTER: Send address changes to **Occupational Health Management**™, P.O. Box 740059, Atlanta, GA 30374.

AHC Media LLC is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

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

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

This activity is intended for occupational nurses, occupational health managers and directors. It is in effect for 36 months from the date of publication.

Subscriber Information

Customer Service: (800) 688-2421 or fax (800) 284-3291, (customer service@ahcmedia.com). Hours: 8:30-6:00 M-Th; 8:30-4:30 F.

Subscription rates: U.S.A., one year (12 issues), $489. Add $17.95 for shipping & handling. Outside U.S., add $30 per year, total prepaid in U.S. funds. Discounts are available for group subscriptions. For pricing information, call Tria Kreutzer at (404) 262-5482. Missing issues will be fulfilled by customer service free of charge when contacted within one month of the missing issue date. **Back issues**, when available, are $82 each. (GST registration number R128870672.)

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Identify cause of burnout

In most cases, the most effective interventions focus on the organization, *not* the worker, says **Mary K. Salazar**, EdD, RN, COHN-S, FAAOHN, FAAN, professor in the Department of Psychosocial and Community Health at the Seattle-based University of Washington School of Nursing.

Several studies provide evidence that excessive workloads, role ambiguity, conflict and lack of social support are major contributors to occupational stress and worker burnout.[3, 4, 5]

"Management's leadership styles have also been related to stress and burnout. Over-demanding employers are particularly problematic," says Salazar.

A first step in dealing with stress-related problems is to determine if employees are suffering from burnout and, if they are, determine the root cause, says Salazar. For example, burnout may be related to work overload, lack of control, no sense of personal accomplishment, or an intolerant employer, she explains. "Once the cause of the burnout is identified, then it can be addressed," says Salazar.

In most cases, it is not useful to require employees to attend self-help classes such as stress reduction, according to Salazar. "Studies have found that workers suffering from burnout tend not to attend these classes," she says. "Furthermore, individually focused strategies such as counseling or medication do not address the problem of burnout."

However, when there are indicators of psychological problems, workers *should* be evaluated for depression and anxiety, which would require a different type of intervention, she says. "But even in these cases, if burnout is a part of the problem, it needs to be addressed through some type of workplace intervention," says Salazar.

Prevention is key

Leaders at Philadelphia, PA-based GlaxoSmith Kline believe it is more important to prevent worker

burnout, rather than waiting to devote a great deal of resources once someone is approaching burnout, says **Ann Kuhnen**, MD, MPH, vice president of employee health management. A two-day "Energy for Performance" course given by trained facilitators at the Orlando, FL-based Human Performance Institute was piloted in one of the company's businesses with 350 participants, and it now is being offered to all employees onsite each month during 2008. **(For more information on the course, see resource box, right.)**

"It is geared at helping people become better stewards of energy so that they can best engage when it really matters, at work and in personal life," says Kuhnen. "Participants learn to maximize their energy by fully engaging their hearts, minds, spirits, and bodies in completion of the important missions they take on each day. If heeded, this is a fundamental step in avoiding burnout."

Employees can also attend a half-day "Personal Resilience" training course that was developed internally and explores energy, self-awareness and purposeful living, says Kuhnen. Over the past two years, 18,000 employees have participated. "We have already seen increased engagement, job satisfaction, and willingness to experiment with new ways of working, plus decreased pressure from work-related conflicts," reports Kuhnen.

At Rochester, NY-based Xerox Corp., employees are given several tools to manage stress, including electronic tips, bulletin board materials, newsletter and intranet articles, says **Sandi Alexander Tuttle**, manager of the Xerox Recreation Association. The information is pulled from a variety of sources, including the Wellness Council of America. **(See resource box, right.)** "Additionally, we offer an online stress management course with personalized strategies to manage stress, regardless of the source of that stress," says Tuttle, who adds that the course was developed internally. Each year during open enrollment, employees are offered a $200 credit to their benefit allowance if they complete a health risk assessment and, if someone scores high in the area of stress, they are encouraged to take the online stress program, says Tuttle.

The company also offers a LifeWorks program provided by Minneapolis, MN-based Ceridian, a workplace effectiveness service providing information and resources for a well-balanced life, says Tuttle. **(For more information on the program, see resource box, right.)** To inform employees about the programs, "health education leaders," a network of employees who volunteer to communicate wellness information, periodically receive fliers to post, she adds.

SOURCES/RESOURCES

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- The Human Performance Institute offers energy management training to increase individual and organizational performance, productivity and engagement. *Energy for Performance* courses include an Executive Course, Client-led Course, and Train-the Trainer, and range from $500 to $5,500 per person. For more information, contact Human Performance Institute, 9757 Lake Nona Road, Orlando, FL 32827. Phone: (407) 438-9911. Fax: (407) 438-6667. E-mail: info@energyforperformance.com. Web: www.energyforperformance.com.
- A variety of free reports and publications on worksite wellness programs are available from The Wellness Council of America web site (www.welcoa.org). Click on "Free Resources." For more information on consulting and training programs, contact: The Wellness Council of America, 9802 Nicholas St., Suite 315, Omaha, NE 68114. Phone: (402) 827-3590. Fax: (402) 827-3594. E-mail: wellworkplace@welcoa.org.
- Workplace effectiveness services with training for employees and management are offered by Ceridian. Pricing varies based on the number of employees and on the types of services you select for your organization. For more information, contact: Ceridian, 3311 E. Old Shakopee Road, Minneapolis, MN 55425-1640. Phone: (800) 729-7655. Web: www.ceridian.com.

In most of Xerox's large locations, on-site fitness facilities are provided so employees can participate in Yoga, Tai Chi, go for a walk or run, lift some weights, or participate in a group exercise class to relieve stress, says Tuttle. "Understanding the many ways our employees are stretched and stressed, and making these programs available, is well worth the resources necessary to do so," she says.

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Reap benefits of integrating medical, behavioral health

(Editor's Note: This is part two of a two-part series on behavioral health issues. This month, we report on a growing trend of integrating behavioral health and medical care. In a related story, we cover the use of claims data to do outreach with workers at high risk for behavioral health problems. Last month, we reported on research linking depression and productivity.)

If one of your employees was being treated for severe back pain, would that individual be screened for depression and anxiety? Probably not, but the fact is, workers with chronic medical conditions are two to three times more likely to have a serious behavioral health condition, which often go untreated, says **David Whitehouse**, MD, chief medical officer for Golden Valley, MN-based OptumHealth Behavioral Solutions.

The number of hospital stays with a secondary diagnosis of depression increased 166% from 1995-2005 to 2.47 million, according to a new report from the Agency for Healthcare Research and Quality.[1] In addition, depression and anxiety are linked to poor adherence to medication and treatment regiments, which exacerbates chronic health conditions, says Whitehouse.

Traditional behavioral health programs work well if employees self-identify a problem, but many don't, says Whitehouse. "There is a disjointed system that is not easy for patients to navigate. Also, there is a stigma on mental illness," he adds. Most behavioral health care is delivered by primary care physicians, which means care is not optimal and often includes short courses of medications without counseling or follow-up, he says.

Of the 20% of people who drive 80% of medical costs, half of that group has a psychiatric issue, which is often undiagnosed, untreated or only partially treated, says Whitehouse. "This significantly impacts clinical outcomes and the cost of the care," he says.

Evidence is clear

Previously, psychiatric conditions were largely ignored, primarily because employers weren't fully aware of the impact of indirect costs such as productivity and presenteeism, says Whitehouse. "Because it's hard to capture those numbers, making the case to CFOs to invest in this hasn't been easy. But the evidence is pretty clear now," says Whitehouse, pointing to a recent study showing the impact of a depression outreach program on productivity.[2]

A growing number of companies are integrating medical and behavioral health care, according to Whitehouse. Incorporate productivity tools into health risk assessments, by including a self-report of how medical conditions, including

EXECUTIVE SUMMARY

Employers are integrating behavioral and medical care, as workers with chronic medical conditions are more likely to have depression and anxiety.
- Address behavioral health conditions to prevent exacerbation of chronic health conditions.
- Ask employees to self-report how psychiatric conditions impact their productivity.
- Do outreach with disease management, case management, and disability vendors.

psychiatric conditions, are impacting the employee's productivity, advises Whitehouse. Screening for depression is not enough, he says, you also need to screen for substance abuse as well, because many individuals with psychiatric conditions abuse drugs or alcohol.

"The issues keeping people out of work are not the same as the issues impacting people at work," says Whitehouse. "Lost productivity of one hour a day turns into weeks over the course of a year. If you multiply that by the number of employees, it's like having a huge number of your workforce not turn up for the whole year."

Perform outreach

Instead of waiting for employees to reach out for help, have disease management, case management, and disability vendors do outreach with individuals identified as high risk for a behavioral health problem, says Whitehouse. "During that outreach call, which the employee has consented to, there is some attempt to get at the services and issues that are available," he says.

For example, a nurse may explain to an employee with chronic back pain that many people with this condition feel overwhelmed. If a problem is identified, the employee can be transferred to a specialist or contacted later by phone or e-mail to set up an appointment. "We tell our people there is only one goal of the first call, and that is to get to the second call," says Whitehouse. "A lot of outreach calls fail because they ask 35 questions, and the employee feels they are being interrogated."

Better identification can lead to better treatment, resulting in decreased medical costs, greater employee satisfaction, and increased workplace productivity, he says. "Just as exercise and diet can prevent a serious medical condition from occurring, stress-coping strategies can prevent a serious behavioral health condition from occurring," says Whitehouse.

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Claims analysis says 50% have comorbid conditions

Depression, anxiety linked to chronic conditions

At Eden Prairie, MN-based Cigna, claims data have revealed a clear link between mental and physical health of employees.

"We have done claims analysis on everyone we insure and really see the connection between health of the mind and health of the body," says **Peggy Audley**, director of depression disease management for Cigna's behavioral health unit.

The company's data showed that 50% of employees with chronic medical conditions have a comorbid behavioral health condition, she reports. "Diabetics have double the rate of depression over the general population," adds Audley. "If you do not look at the whole person, your medical costs are going to go up."

Cigna has developed a broad array of programs to emphasize an integrated approach to care, including a depression program that went live in January 2006. "There is a big gap out there: 83% of employees with symptoms of depression or anxiety don't go to a therapist or psychiatrist," says Audley. "Instead, they go to a primary care provider, where they maybe get eight minutes with a doctor who doesn't have the time to look at the causes behind the problem, side effects of medication, or follow-up care."

Claims from the primary care setting are screened for diagnoses of depression and anxiety. "Anxiety plays a big part in a person's ability to function well, so we look at both of those," says Audley.

EXECUTIVE SUMMARY

By examining claims data, employers are learning that a significant percentage of employees with chronic medical conditions also have behavioral health conditions.
- Look for diagnoses of depression or anxiety in claims from the primary care setting.
- Offer telephone coaching for employees with chronic conditions.
- Have case managers screen employees for depression.

About half of these individuals have a chronic condition as well, such as asthma, chronic obstructive pulmonary disease or diabetes, notes Audley. "Chronic health conditions have 2.5 higher costs than those without depression," she says. "Those are high risk people, so we do a telephone coaching program using behavioral clinicians. We are truly integrating the behavioral with the medical."

Referrals also are taken from case managers, who now screen every employee they work with for depression, says Audley. "We coordinate work life referrals and Employee Assistance Program referrals. We also work with primary care providers and give them direction on how to manage the depression," she says.

Questions about depression are included in the health risk assessment completed by all employees, and employees are asked if they would like a follow-up call. "If the person screens positive for depression, then the case manager has some information about how receptive the person is to taking a referral," Audley says.

If given appropriate treatment, many employees with depression will get better quicker, says Audley. "Our first-year results showed an 82% improvement in presenteeism, and absenteeism decreased by 81%," she says. "We are seeing and hearing some wonderful stories of improvement, because people are able to get the correct treatment."

"De-stigmatize" depression

At Overland Park, KS-based Sprint, a "holistic approach" is taken for employee health, says **Collier Case**, director of health and productivity. In early 2005, a "depression awareness campaign" was initiated with the goal of better detection and treatment, reduced absenteeism, and lowered direct medical costs, he says.

Depression was "de-stigmatized" by openly educating employees on available resources and treatments, through a survey about knowledge of depression created by Golden Valley, MN-based OptumHealth Behavioral Solutions, a brochure sent electronically emphasizing that "mental health matters," developed by the Mid-American Coalition on Health Care, and a webcast featuring an expert on depression that could be viewed by employees from desktops, says Case. **(For more information on Mid-American Coalition, see resource box, right.)** "A traditional return on investment was not conducted in the time immediately following our initiative, but by the end of the year, 1,800 people had viewed the webcast," he says.

Comparative information for Sprint's 60,000 employees showed a 10% increase in number of patient visits for depression in 2005 over 2004 while use of anti-depressants remained constant, and Employee Assistance Program claims related to stress/emotional/psychological needs increased to 58% from 50% in 2004.

Conditions with high levels of co-morbidity with depression are targeted, including heart failure, coronary artery disease, chronic obstructive pulmonary disease, diabetes, asthma, cancer, hypertension, stroke, arthritis, and chronic pain, says Case. Medical and pharmacy claims data are used to specifically target unrecognized behavioral needs in the chronic medical population, and outreach is done with individuals likely suffering from depression, says Case.

Disease management nurses are trained to identify signs of depression, ask appropriate questions, and direct employees to available resources.

"Identified members receive a letter and program brochure advising them to expect a call," says Case. ■

SOURCES/RESOURCE

For more information about helping employees with depression, contact:

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- **Collier Case**, Director Health and Productivity, Sprint, Overland Park, KS. E-mail: collier.w.case @sprint.com.

- The Mid-America Coalition on Health Care links major employers with health care delivery stakeholders to address the rising costs of health care and the health and wellness of employees. For more information, contact: The Mid-America Coalition on Health Care, One West Armour Blvd., Suite 204, Kansas City, MO 64111. Phone: (816) 753-0654. Fax: (816) 531-0575. E-mail: bstanley@machc.org.

Low workers' comp rates bad for care, return to work

Evidence-based care reduces costs

Workers' compensation fee schedules do not properly recognize and reimburse physicians who restore injured workers to optimal function and promote rapid return to work, says a new position statement from the American College of Occupational and Environmental Medicine (ACOEM).

In fact, workers' compensation payments often are so low that they make it almost impossible for occupational health clinics to be financially successful, says **William Patterson**, MD, MPH, assistant vice president of Concentra Health Services in Londonderry, NH, and member of ACOEM's board of directors.

Use of evidence-based guidelines to guide the treatment of work-related medical conditions and injuries reduces costs, says Patterson. "Unnecessary treatment is avoided, and administrative hassle is reduced," he says. "The research shows that if you deliver high quality occupational health care to injured workers, you will have better outcomes, quicker return to full duty, and lower medical costs." **(To obtain the ACOEM's guidelines and position statement, see resource box, right.)**

Although the ACOEM guidelines are in use throughout the country, few states currently mandate the use of treatment guidelines by statute or regulation. The guidelines have been adopted by law in the states of California, Nevada, and Tennessee, and they may be used by networks in Texas. Several other states are considering adoption of the guidelines by regulation, including Kentucky, Michigan, and Utah. "In addition, the ACOEM Low Back Guideline has been recommended for adoption in New York by the New York Department of Insurance," says Patterson.

In California, adoption of the guidelines resulted in fewer visits to physical therapists and chiropractors. "There is no evidence that three times a week, six months out, is helpful or cost effective. That's an example of how they have been applied," Patterson says.

The guidelines also define limitations of diagnostic testing such as magnetic resonance imaging (MRI). "There are frequent false positives in the use of MRIs. Research shows that by a certain age, a high percentage of the normal population will have an abnormal MRI," notes Patterson.

Fees vary by state

In some states, fee schedules for workers' compensation are so low that it inhibits the ability of an occupational health provider to run a functioning business, says Patterson.

EXECUTIVE SUMMARY

Workers' compensation payments often are inappropriately low, which makes it difficult for occupational health clinics to be financially successful, says a position statement from the American College of Occupational and Environmental Medicine (ACOEM).

- Use of evidence-based guidelines for workplace injuries reduces costs.
- Some states have adopted ACOEM's guidelines as standard of care.
- Workers' compensation fee schedules should be higher than Medicare rates because the care is more complicated.

SOURCES/RESOURCE

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The American College of Occupational and Environmental Medicine (ACOEM)'s *Occupational Medicine Practice Guidelines: Evaluation and Management of Common Health Problems and Functional Recovery in Workers, 2nd Edition* costs $175 for ACOEM members and $199 for non-members. To order a copy, call (847) 818-1800. To access the position statement on workers' compensation fees, go to the ACOEM web site (www.acoem.org). Under "Policies & Position Statements," click on "Position Statements," "Ensuring Quality of Care in Workers' Compensation Programs: Fair Fee Schedules and Evidence-Based Guidelines."

One of the most egregious examples is New York, where workers' compensation rates for routine office visits are below those of Medicare, even though delivering workers' compensation services is more complicated than regular medical care because it requires more communication, says Patterson. "You have to call the employer, fill out paperwork, get preapproval for the MRI, write up restricted duty forms, and so forth. With an injury from skiing, there is none of that."

Workers' compensation fee schedules should be 125% to 150% of Medicare rates as a minimum, says Patterson. "Otherwise, the development of qualified occupational health programs is inhibited, which rebounds negatively on people returning to work and the economic health of state employers," he adds. "It is a question of fairness as well. We should have an appropriate fee schedule." ■

Need 'urgent' to ensure HCW safety in flu pandemic

The weakest link in pandemic preparedness?

Not enough is known about how to protect health care workers in an influenza pandemic, and that lack of knowledge critically weakens the nation's preparedness, an Institute of Medicine (IOM) panel has concluded.

The IOM experts determined that there is "an urgent need" for more research and better technologies for personal protective equipment and to raise the "employer and employee commitment to worker safety and appropriate use of PPE [personal protective equipment]." Hospitals need to develop a culture of safety, they said.

"Health care worker safety is essential for patient safety and patient care. Being prepared for an influenza pandemic places a priority on protecting the health care work force," the IOM experts stated.

Despite the urgent tone of the report, it garnered little attention when it was released. The IOM didn't issue a press release or hold a press conference, as it has with prior patient safety or nursing work force reports. Yet the IOM Committee on Personal Protective Equipment for Healthcare Workers During an Influenza Pandemic sought to move forward by bringing together representatives from The Joint Commission accrediting body, labor unions, and federal agencies.

Bonnie Rogers, DrPH, RN, COHN-S, LNCC, a professor at the University of North Carolina School of Public Health in Chapel Hill and a member of the panel, says the urgency leads to the doorstep of the policy-makers, who should "read this report and allocate resources to get the work done to protect the work force and the nation."

IOM panel members were "shocked" by the lack of scientific evidence regarding the transmission of influenza, says Rogers, who also is director of the North Carolina Occupational Safety and Health Education Research Center. But with a commitment of resources, many preparedness gaps could be filled as quickly as within one to three years, said panel chair **Lewis Goldfrank**, MD, chair of emergency medicine at the New York University (NYU) School of Medicine and director of emergency medicine at Bellevue Hospital, NYU Hospitals, and the VA Medical Center in New York City, in the report's preface. "It is our belief that health care workers will feel secure only when the PPE that they are asked to wear is as safe and effective as the vaccines and medications they are asked to take," he said.

Many hospitals have stockpiled masks, respirators, and gloves for use during a pandemic. But a hospital's responsibility for ensuring the safety of workers goes far beyond that, the IOM panel said. "The institution needs to provide the equipment and the training and needs to make sure people are compliant," Rogers explains. Using safety equipment, including respirators when appropriate, should be as natural as buckling a seat belt when you get into a car, she says.

Employees' perception of the safety culture, which is how much the institution values worker safety, influences work practices, injury rates, employee satisfaction, and even patient safety, says **Robyn Gershon**, MHS, DrPH, professor in the Department of Sociomedical Sciences at the Mailman School of Public Health at Columbia University in New York City. Gershon, an expert on safety climate, presented study findings to the IOM panel and is a member of the broader IOM Committee on Personal Protective Equipment for Workplace Safety and Health. Health care workers will be more likely to report for work during a pandemic or other emergency if they feel adequately protected, she says.

Hospitals should make sure that employees have a personal emergency plan so they know

who will care for their children if they are called into work during a health emergency, she says. They should beef up their education and training and make sure that health care workers are fit-tested for respirators, she says. "Fit-testing should be a priority now. You can't do it when everything is chaotic," Gershon says.

There are other barriers to respirator use. The N95 filtering facepiece respirators are uncomfortable and make it difficult to communicate with patients — or even to breathe. "Health care workers are not really sure that these things really work. That's problematic because when you weigh that against all these barriers, it's understandable why some people won't wear them in all instances," she says.

If health care workers understand how the respirators work, why they are necessary, and how to don and doff them properly, they will be more likely to be compliant, she says.

The panel also recommended that The Joint Commission enforce standards that ensure the proper use of PPE is a priority. The Joint Commission will respond to the report after its final release, says **Louise Kuhny**, RN, MPH, MBA, CIC, associate director for standards interpretation. But she noted that The Joint Commission has several standards that apply to worker protections and pandemic preparedness. For example, surveyors may ask employees about the hospital's plan for handling "an influx of infectious patients," including the use of protective gear, she says. "Employee health issues are definitely addressed [by the standards]," she says. "We do write 'requirements for improvement' related to employee health."

Not enough known about transmission

Meanwhile hospitals need more guidance. What is the best personal protective equipment to protect against the spread of pandemic influenza? This basic question can't be answered without more information on the transmission of influenza, the panel concluded.

The National Institute for Occupational Safety and Health (NIOSH) and other agencies need increased funding to study influenza transmission and appropriate PPE, the panel said. "The basic research really needs to come first," says Rogers.

The IOM panel recommended the creation of an Influenza Study Network and collaboration between the U.S. Department of Health and Human Services and the World Health Organization to mount a global study of influenza transmission and prevention. Without that information, it's not possible to know the most likely route of transmission — contact, droplet, or airborne — or how best to protect workers, the panel said.

The panel also stressed that procedure or surgical masks are not personal protective equipment and cannot be used in place of respirators.

Bill Borwegen, MPH, occupational health and safety director of the Service Employees International Union in Washington, DC, lauded the panel for targeting the lack of scientific information about effective respiratory protection against infectious diseases. "For too long, we've relied on so-called expert opinion and qualitative judgments," he says. "The emphasis on evidence-based science is what's revolutionary."

The panel also called for better design and testing of PPE for health care workers.

The report could have far-reaching impact in shaping regulatory and research priorities, says **Les Boord**, director of the National Personal Protective Technology Laboratory at NIOSH, which requested the report. "It identifies a lot of issues and concepts for advancing the state of the art of personal protective technologies for the health care worker," he says. "I think it's a very important and significant report."

(Editor's note: A free prepublication copy of the IOM report, Preparing for an Influenza Pandemic: Personal Protective Equipment for Health Care Workers, is available at www.nap.edu/catalog.php?record_id=11980.) ■

How many health care workers will be home sick?

Software predicts pandemic absenteeism impact

To prepare for an influenza pandemic, you've counted your ventilators and calculated your patient surge, sought options to add bed space, and assessed the capacity of the emergency department. But have you estimated how many of your employees will show up for work?

FluWorkLoss software from the Centers for Disease Control and Prevention in Atlanta enables hospitals to estimate employee absenteeism based on the severity and length of a pan-

demic. The default program is based on a moderate pandemic similar to the one in 1968, with a 15% to 35% clinical attack rate. To test the consequences of a more severe pandemic, software users can change the rate of deaths, hospitalizations, and outpatient visits.

Employers create scenarios. How long with the pandemic last? A short time frame (four weeks) means a higher peak of absences; a longer pandemic (up to 12 weeks) means the illnesses will be spread out.

You can alter assumptions about how many days employees will be out of work with the flu or how long some might need to be hospitalized.

"We really do encourage you go in and play endless 'What if's?'" says **Martin Meltzer**, PhD, senior health economist at CDC. During seasonal flu, sick employees typically stay home less than one day. During a pandemic, they may be sicker and employers may want them home for 24 hours or more after symptoms subside, for a total absence of at least five days. "The employees and the employers can see the impact of these [scenarios]," he says.

Employees also may stay home to care for ill family members or to take care of children who have been sent home as schools are closed. To estimate the impact of that, you may want to get some information on family caregiving responsibilities by identifying how many employees listed dependents on their health insurance or by conducting an anonymous survey, Meltzer advises.

The FluWorkLoss software includes a measure for "cohabiting" adults, who may need to take care of a spouse or partner. However, it doesn't account for employees who may not show up for work out of fear of contracting the illness. Surveys of health care workers indicate that 50% may be not show up because of fear of risk to themselves or their family members.[1] Meltzer advises employers to add in a factor for that additional absenteeism.

While the software was based on data from previous pandemics, there are many unknowns and there's little data on how many days a worker might be absent while recovering from a pandemic strain of influenza or caring for a sick family member. For example, the software has a default value of 40 days to replace a health care worker who died from pandemic influenza. Users can change that to another value.

Despite its limitations, the software can be useful in providing a framework for various scenarios. "I hope people will start thinking of how they would replace [workers], how they would stretch out the force, what kind of cross-training they'll do," says Meltzer. "[They should consider] what are the most essential activities that need to carry on and what can be shut down."

(Editor's note: FluWorkLoss is available at www.cdc.gov/flu/tools/fluworkloss.)

Reference

1. Qureshi KA, Gershon RRM, Staub T, et al. Healthcare workers' willingness to report to duty during catastrophic disasters. J Urban Health 2005; 82:378-388. ■

CDC asks health workers for flu vaccinations

Gerberding addresses myths, risk to patients

Julie Gerberding, MD, MPH, director of the Centers for Disease Control and Prevention, has taken the unusual step of directly appealing to health care workers to get vaccinated for seasonal influenza.

"This year, don't get the flu, and don't spread the flu," Gerberding said in a letter to health care providers posted on a CDC flu web site. "Protect yourself, your loved ones, and your patients by getting a flu vaccine."

The appeal came as part of National Influenza Vaccination Week. With only 40% of heath care providers annually immunized for flu, Gerberding went so far as to call the historic apathy "unconscionable" at a recent press briefing at the National Foundation for Infectious Diseases (NFID) in Bethesda, MD. She was more diplomatic in the appeal to health care workers, reminding them that they should be vaccinated for the following well-established reasons:

- Health care workers are in contact with people at high risk from serious flu-related complications every day.
- Low vaccination rates among health care workers have been associated with influenza outbreaks in hospitals and nursing homes.
- You can get the flu and be asymptomatic or have mild symptoms, but still be contagious to others, which puts your patients at risk.
- The safety of your patients may depend on your getting a flu vaccine this and every year.

Regarding the current vaccines, Gerberding noted that the "nasal spray" vaccine [live, attenuated influenza vaccine, (LAIV)] is an option for healthy children and adults aged 2-49 years old. LAIV can be used in health care workers, except for those in contact with severely immunosuppressed patients cared for in specialized patient-care areas, she noted. In addition, the injectable inactivated vaccine is safe and readily available for people aged six months and older, including pregnant women. Knowing that some persistent myths have undermined annual vaccination compliance by health care workers, Gerberding emphasized:

- True adverse events from influenza vaccines are rare. The most common problems are pain at the injection site (with the shot), or stuffy nose, headache, or cough (from the nasal vaccine).
- Neither type of vaccine can give you the flu.
- Influenza vaccines prevent influenza illness in 70% to 90% of healthy adults younger than 65 years of age, when the vaccine and circulating viruses are well-matched.
- Because it takes two weeks for the vaccine to provide protection, people who believe they contracted the flu after being vaccinated may have been exposed before they developed antibodies. Alternatively, they may have been exposed to another type of respiratory virus with similar "flu-like" symptoms. ■

Sick food workers cause restaurant outbreak

Ill food service workers propagated a massive outbreak of norovirus in Michigan last year that eventually sickened 364 restaurant patrons and 32 workers. Vomiting by a line cook was thought to be a significant factor in that it contaminated the environment and possibly contributed to airborne spread of the virus to other workers and patients.

"In a norovirus outbreak, a vomiting incident is a major risk factor for norovirus illness and can double the attack rate," the Centers for Disease Control and Prevention (CDC) reported. "In this outbreak, vomiting by a line cook at the work station might have contributed to transmission. Because of the open physical layout of the restaurant, no barrier impeded airborne spread of the virus from the kitchen to the main dining area."[1] Foodborne transmission also might have contributed to the outbreak, as some dishes specifically prepared by the index case were linked to illness in diners. In addition, the restaurant's use of cleaning cloths soaked with a quaternary ammonium-based cleaning product likely was ineffective in disinfecting the restaurant, the CDC reported. State public health officials recommended the following measures for infection control and environmental decontamination after any vomiting incident in a food-service establishment.

First, any exposed food or single-service articles (e.g., drinking straws, takeout containers,

CE Objectives / Instructions

The CE objectives for *Occupational Health Management* are to help nurses and other occupational health professionals to:

- Develop employee wellness and prevention programs to improve employee health and productivity.
- Identify employee health trends and issues.
- Comply with OSHA and other federal regulations regarding employee health and safety.

Nurses and other professionals 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, you must complete the evaluation form provided in the June issue and return it in the reply envelope provided in order to receive a letter of credit. When your evaluation is received, a letter of credit will be mailed to you. ■

COMING IN FUTURE MONTHS

- A major health threat for nightshift workers
- Should you pay employees to stay healthy?
- Update on return to work after gastric bypass
- Liability risks of preventable workplace injuries

and paper napkins) should be discarded, and all surface areas within at least a 25-foot radius of the vomiting site should be disinfected with a bleach solution.

Second, ill employees should be excluded from work for at least 72 hours after symptoms subside, and employees returning after a gastrointestinal illness should be restricted from handling kitchenware or ready-to-eat food for an additional 72 hours.

Third, because thorough disinfection might be necessary, partial or complete closure of the food establishment should be considered after a vomiting incident.

CE questions

1. Which is recommended for workers suffering from burnout?
   A. Require attendance at self-help classes.
   B. Focus on the worker, not the organization.
   C. Determine the root cause of the burnout.
   D. Offer only counseling or medication.

2. Which is recommended regarding employees at risk for behavioral health problems?
   A. Wait for employees to self-report problems.
   B. Have disease management, case management, and disability vendors perform outreach.
   C. Encourage employees to seek care at their primary care physician's office.
   D. Avoid investing resources since return on investment is unclear.

3. What was discovered after performing a claims analysis on employees at Cigna?
   A. Hardly any employees with chronic medical conditions had depression.
   B. Diabetics had less depression than the general population.
   C. Most employees with anxiety went to a psychiatrist or therapist.
   D. Half of employees with chronic medical conditions have a comorbid behavioral health condition.

4. Which is accurate regarding use of evidence-based care for workplace injuries?
   A. Care is more cost effective.
   B. Workers take longer to return to work.
   C. Outcomes are poor.
   D. Overall medical costs are higher.

Answers: 1. C; 2. B; 3. D; 4. A.

Finally, restrooms used during or after a vomiting incident should be closed immediately until they are disinfected properly with bleach solution.

Reference

1. Centers for Disease Control and Prevention. Norovirus Outbreak Associated with Ill Food-Service Workers — Michigan, January-February 2006. *MMWR* 2007;56:1,212-1,216. Accessed at www.cdc.gov/mmwr/preview/mmwrhtml/mm5646a2.htm. ■