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IN THIS ISSUE

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Workers' comp cost: Getting the devil out of the details

'Show the employer how much they would potentially save'

Trying to determine exactly what drives your biggest workers' compensation costs? The devil is in the details.

"You should look not only at the types of injuries you are having, but where they are occurring, the departments, supervisor involvement after the accident, and follow-up care for the injured worker," says **Mary (Penny) B. Nicholls**, RN, CCM, COHN-S, a disability consultant with Alabama Power Company in Birmingham and a member of the advisory board for the Deep South Center for Occupational Health & Safety at the University of Alabama at Birmingham.

To reduce worker's compensation costs, do these four things:

1. Do a thorough evaluation of individual job tasks to identify associated risks or hazards.

"You cannot be effective in delivering care to workers if you are not knowledgeable about specific work processes," says **Kathy Dayvault**, RN, MPH, COHN-S/CM, an occupational health nurse at PureSafety in Franklin, TN. "Be familiar with their potential or actual impact on workers."

Do a walkthrough at regular intervals and observe employees doing their jobs, accompanied by a safety professional, industrial hygienist, or member of management. "This helps you to learn about job concerns from a different perspective," says Dayvault. "An interdisciplinary team is essential in risk or hazard identification and reduction."

She points to research showing that back strain injuries in healthcare workers, and workers' compensation costs, were decreased after safe movement programs were implemented.[1] "This type of program is a good example of a safety program which focuses on specific job risks," says Dayvault.

2. Obtain statistical data regarding injury type, department, frequency of injuries and reoccurrence.

EXECUTIVE SUMMARY

To reduce workers' compensation costs, you'll need to obtain specific information and work collaboratively. Use these approaches:

- Observe employees doing their jobs to determine specific risks.
- Learn about an injured worker's medical history and work environment..
- Give incentives for reporting unsafe work practices.

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Once you have this information, associated costs with injuries can be provided by the workers' compensation carrier or in-house claims adjuster. This information can identify areas of high injury rates.

"The carrier can provide a historical overview of injuries. This is important because it is the justification to make a change that might be considered costly," says Dayvault. "You can show the employer how much they would potentially save in the future if the change is made."

3. Learn as much as you can about the injured worker.

Nicholls says that in order to understand hidden worker's comp drivers, you must understand the injured worker's past medical history, social factors, and work environment. Learn about job dissatisfaction, interpersonal conflicts, the type of work they do, lack of upward mobility, and physical stressors.

Use team approach to ID worker's comp costs

Consider yourself a member of the "worker's compensation team" as a strategy to reduce costs, says **Mary (Penny) B. Nicholls**, RN, CCM, COHN-S, a disability consultant with Alabama Power Company in Birmingham and a member of the advisory board for the Deep South Center for Occupational Health & Safety at the University of Alabama at Birmingham.

In addition to the occupational health professional, other "players" may include the injured worker, employer, safety professional, health care provider, case manager, insurance adjusters, attorneys and vocational rehabilitation specialist. She gives these recommendations:

1. Work with safety professionals to investigate early and thoroughly.

"Tie the facts down early, as it may take years to come to court," says Nicholls. She says you should:

- Identify mechanisms of injury, and relate this information to the health care provider;
- Determine whether the condition was causally related to the work or job;
- Determine whether the injuries were sustained during an unreasonable or substantial deviation from employment and not compensable.

2. Work collaboratively with health care providers to assess causality, provide physical capacities, expedite care, communicate with patient, family, and company and coordinate care with other health care providers.

"The health care provider must ask whether there was a clear, probably traumatic event, to assess the mechanism of injury. Are the symptoms consistent with the source of injury, or are they due to repetitive stress which is more difficult to identify?" asks Nicholls. "They must also determine if it is pre-existing, a reoccurrence, acceleration, an exacerbation, or an aggravation This determination is a cost driver within itself."

3. Convey to injured workers that you care about them.

"A trust begins to build and the results will be greatly improved," says Nicholls. "History shows that injured workers who feel truly cared for do not sue their companies. This will result in cost control, even though it is not disease-specific!"

"All of these will affect the response to medical treatment, either overtly or covertly," says Nicholls. "The more we know about our injured worker, the better we can control the medical treatment plan. Thus, there will be better outcomes, in both cost and recovery to maximum medical improvement with little or no impairment rating."

4. Don't overlook the cost of litigation.

"We can all compare our case costs with the

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Rewarding workers for lack of injuries is risky

Have you learned that back injuries are the top cost drivers in workers' compensation cases at your workplace? Imagine the impact of giving incentives to various departments if zero injuries are reported within a certain time period. Or then again, maybe not.

"Not reporting injuries, especially cumulative trauma injuries, is not a good approach. If workers are pressured not to report injuries, they may defer reporting until the pain is so bad that treatment ends up being more involved," says **Eileen Lukes**, PhD, RN, COHN-S, CCM, FAAOHN, a Mesa, AZ-based member of the American Association of Occupational Health Nurses' board of directors. "A simple first aid injury could instead become recordable and maybe even a lost-time case." This is particularly dangerous for cumulative trauma injuries, she adds.

Incentive programs for decreased reporting of injuries are counterproductive, since these don't address unsafe working conditions, says **Kathy Dayvault**, RN, MPH, COHN-S/CM, an Occupational Health Nurse at PureSafety. "Be careful when instituting incentive programs such as these. It can appear that the responsibility of injury prevention belongs to employees, not employers," warns Dayvault. Use these approaches instead:

• Make minor, low-cost changes.

For example, if items are raised off the floor so they can be lifted from an easier working height, back injuries may be reduced. "Methods such as these are simple and do not cost a lot of money," says Dayvault.

• Reward employees for reporting unsafe work practices.

"This is much more effective at improving injury/incidence rates than rewarding decreased reporting of injuries," says Dayvault. Employees could be given incentives for calling attention to a coworker performing an unsafe act, such as driving a forklift too fast or turning blind corners and not blowing the horn, for example.

"Reward employees for following safety rules, or for giving suggestions to make a task or process safer," says Dayvault. "Spotlight employees in a company newsletter for raising safety awareness."

Lukes recommends insisting that managers be evaluated on incorporating safety and prevention in their annual business goals. "Reward safe behaviors like pre-workday stretching," she says.

• Use a team approach.

"This is more effective than trying to make changes independently," says Lukes. "Sitting down with management and safety to discuss trends and costs will increase buy-in from others. When the nurse presents the data, the solution may be self-evident."

Meeting with teams of employees is another way to come up with effective solutions. "After all, they're the ones doing the work, so they may be in the best position to figure out what needs to be changed," says Lukes.

• Implement an ergonomic program which addresses cumulative trauma injuries.

"When partnered with design change and ergonomically correct tools, not only can ergonomic injuries be reduced, but eradication can occur as well," says Dayvault.

Official Disability Guidelines predicted values and say what a good job we do when we are well below on visit frequency, physical therapy and diagnostic testing," says Nicholls.

However, the real costs are revealed when the final outcome for the worker is not as good as the statistics indicate they should be. If a lawsuit occurs, costs will take a significant hit.

"Rarely are the true costs of litigation captured under workers' compensation costs, but these should be," says Nicholls. "Many times, these costs are near the cost, or may exceed the cost, of medical treatment. "

For this reason, your efforts are best spent on developing a process to optimize work injury management that will meet everyone's needs. "The establishment of this type of process will reduce worker's compensation litigation and costs," says Nicholls.

However, Nicholls says that the real benefits of a successful resolution of an injured worker's case can't be measured in dollars. That's because the worker will become the company's best spokesperson after being treated fairly.

"The impact of a successful outcome on the injured workers is so great that the value cannot be truly measured," says Nicholls. **(See related stories on incentive programs, p. 51, taking a team approach, p. 50, and expanding your role, p. 52.)**

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SOURCES

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Look beyond your role in workers' comp

When **Emily Wallace**, RN, BS, COHN-S, currently a Sanford, NC-based occupational health consultant, began her career as an occupational health nurse in the clinic of a large textile firm in Georgia with over 2000 employees and a terrible safety record, she learned something very quickly.

"At that time, as today, management was interested in the bottom line," she says. "I realized immediately that workers' compensation cost was a key to getting senior leaders' attention." Traditionally, the occupational health nurse's role had been limited to providing nursing care to employees.

As the senior nurse, however, Wallace began working collaboratively with other leaders. First, she obtained cost information from the financial department. At a safety committee meeting, she reported workers' compensation costs.

"Prior to this meeting, I had assessed the current safety program looking for ways to prevent illness and injury and lower workers' compensation cost," says Wallace. "I was prepared to not only report cost, but to present ways to reduce this cost." Wallace used these approaches:

• She expanded on the traditional occupational health nursing functions. "This is necessary to make an impression on senior leaders," says Wallace. "Learn more about the finances of the company. Look for ways to expand your role."

• She took a holistic view of employee health. "I realized that prevention of accident and illness is preventative medicine," she says. Wallace developed an exercise program for employees, which was a first at the time.

Wallace was promoted to director of occupational health and safety for the division, reporting to the division plant manager. Shortly after, she presented the company's safety program to the Georgia Textile Manufacturers Association when they received the annual safety reward for 1,000,000 man hours without a lost time injury.

"I realized early on that occupational health had to get upper management's support in order to get middle and first line managers to buy into the safety and health of employees," says Wallace. "Also, don't forget the employees. They must believe that management not only supports, but is involved with, their safety and health." ■

SOURCE

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Is wellness data too dismal to share? Don't be so sure

Even "bad" numbers can help you

Imagine showing higher-ups statistics indicating that thousands of dollars were spent on a weight loss program you implemented recently, but unfortunately, none of the participants actually lost any pounds. Or would you be eager to spread the news that only two employees attended a diabetes lunch-and-learn?

Unfortunately, data don't always tell the story you'd hope for. "Poor attendance at a wellness program is not uncommon, even when you do everything imaginable to publicize the event," says **Eileen Lukes**, PhD, RN, COHN-S, CCM, FAAOHN, a Mesa, AZ-based member of the American Association of Occupational Health Nurses' board of directors. "Or, few employees may participate in a physical activity challenge."

Since these "disasters" are all too common, Lukes says that occupational health managers need to "learn the art of making a silk purse out of a sow's ear, and emphasize the positive." Use these approaches:

• **Even if participation is poor, always ask participants to evaluate the program.**

This way, you can tell others that 95% of the participants said that they learned something new, or 87% said they are committed to eating more fruits and vegetables in their daily diet, says Lukes.

EXECUTIVE SUMMARY

Poor attendance at wellness programs is unfortunately common, but you can still use these results to your advantage. To utilize this data:

• Obtain the percentage of participants who changed their behavior.

• Compute the reduced healthcare costs of any participant who made a lifestyle change.

• Call attention to the need for incentives or support from senior leaders.

• **Remember that even a single participant counts.**

If even one person gets their blood pressure under control or quits smoking, there's a pay-off in reduced health care costs. "The professional literature is full of information about the cost of poor lifestyle choices," says Lukes. "So for every single success, even if it's just three people, a cost-benefit can be calculated."

• **Don't give up just because participation is less than expected.**

"This should not be the signal for nurses to give up their health promotion efforts," says Lukes. "Rather, they should analyze why employees didn't come." Address those reasons when developing your next event or program.

• **Ask for incentives if you think it would help participation.**

Research clearly shows that employees respond to incentives, so use this to your advantage. "Poor participation in a health screening provides ammunition to seek greater executive support in the future," says Lukes.

• **Ask managers to participate.**

Market wellness events to upper management. "If management does not participate, they provide a subtle message to employees that the program is not worth attending," says Lukes. "Enlist them to serve as role models and champion important health promotion efforts." ■

Want to maximize results? Ask what employees want

After a disappointing turnout at a wellness event, the saying "we threw a party and no one came" may come to mind. As for why employees didn't attend, you'll never know unless you ask.

You may learn that an employee might hate the idea of sitting and listening to a lecture on diabetes prevention. They might love the idea of spending their lunch hour finding out how to make a low-cost healthy dinner for that night, however. On the other hand, they might be very interested in attending the lecture, but must attend during evening hours because they always work through lunch.

Jodi Prohofsky, PhD, LMFT, senior vice president of health management operations at Bloomfield, CT-based Cigna, says to keep it simple when you are surveying employees. Use three or four questions that are targeted carefully to what you want to know.

"The most efficient way to do this is online," says Prohofsky. "To generate a 'wow' reaction among employees, responses can be published in real time. Right after the employee clicks on the 'submit' button, the computer can respond with the survey results up to that point." (**See sidebar on what a wellness survey revealed, p. 54, and information to use when planning programs, p. 54.**)

EXECUTIVE SUMMARY

Surveying employees on the type of wellness programs they'd like to see offered can boost participation rates. Some effective approaches::

• Limit surveys to three or four questions.

• Show current results online in real time.

• List only programs and activities that are possible to implement.

Get specifics

"Involving employees is key to building physical activity participation rates," says **Susan A. Randolph**, MSN, RN, COHN-S, FAAOHN, clinical assistant professor of the Occupational Health Nursing Program at University of North Carolina at Chapel Hill.

She recommends keeping surveys short so they are no longer than ten minutes to complete. Ask for comments and ideas in one open-ended question at the end, and be clear that answers are confidential.

Randolph suggests providing a list of programs or activities for employees to indicate their level of interest. "These can be ranked 1 to 5 in order of interest, or just checkboxes to indicate the programs they'd be interested in attending," she says.

Your list might include exercise, weight management, walking club, smoking cessation, nutrition or cooking class, sleep disorders, spiritual wellness, stress reduction, medical self-care, elder care issues, parenting tips, back care, heart disease prevention, and defensive driving.

Be careful that the choices you list are realistic, however, "If you're including a list of possible programs or environmental changes, see that your workplace has the facilities and resources to offer them," says Randolph. She also suggests:

• Ask workers questions that let you assess key characteristics such as age, sex, social relationships, family responsibilities and current physical exercise participation.

Survey says: Workers want more wellness

When Minneapolis, MN-based General Mills surveyed employees about wellness, they got some good news. "We were quite surprised by finding that employees were very positive, and in fact, wanted more health and fitness activities and events," says **Tim Crimmins**, MD, vice president of Health, Safety and Environment.

A survey to determine employee attitudes regarding worksite health promotion was e-mailed to 4674 employees. Even with no incentives for completion, there was a 71% response rate, with 91% saying that encouraging healthy lifestyles was a priority for the company.[1]

Crimmins says that his two pieces of advice to maximize response is to "keep the survey short, and have a well known or respected leader send out the survey to employees."

The company learned that males were less likely to be engaged in a plan to improve health, older workers were more likely to be engaged in health improvement, and employees felt more supported by the organization and less so by their individual managers.

In their written responses, employees asked for more activities and events involving health improvement. "Primarily, the results convinced us to stay the course with our current programming, while keeping in mind that you definitely have to be creative and 'mix it up'" to keep employees engaged," says Crimmins.

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1. Crimmins TJ, Halberg J. Measuring success in creating a "culture of health." *J Occup Environ Med* 2009; 51:351-355.

• Once you learn what workers want, then implement changes that fit with their needs and working conditions. For example, workers may not wish to do activities that make them sweat, because they do not want to shower at work, or shower facilities may not be available.

• Find out when employees would be willing to attend: While at work, during breaks, during lunch hours, or after work. "The more specific, the better. This data will be extremely important in planning programs," says Randolph.

SOURCE

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Use this info to plan programs

Susan A. Randolph, MSN, RN, COHN-S, FAAOHN, clinical assistant professor of the Occupational Health Nursing Program at University of North Carolina at Chapel Hill, says that you should plan occupational health programs and services with these factors in mind:

***Your worker population, based on demographic data and health status.** Consider the number of men and women, age range, the number of older workers, and the number of women in their childbearing years.

Then consider typical health issues, based on your population data. "You can use leading causes of death or health risk factors," says Randolph. These may be heart disease, hypertension, stress, diabetes, arthritis, obesity, use of tobacco products, physical activity and exercise, cancer, or cholesterol.

* **Work environment.** Consider the processes and products, exposures and hazards, and the characteristics of the work itself. "Do worksite walkthrough observations," says Randolph.

* **The philosophy of your employer toward health.** For example, does the company support primary prevention, secondary prevention, and tertiary prevention?

* **Pertinent statutes, regulations, and rules.**

"Programs and services should be targeted to meet the needs of the worker population, and targeted to reduce top cost drivers," she says. Randolph says to use this data to plan and develop programs:

--OSHA 300 logs indicating the types of injuries and illnesses seen;

--Workers' compensation claims;

--Population indicators;

--Insurance data;

--Cost data on lost time, health care, and workers' compensation;

--Health risk appraisals;

--Material Safety Data Sheets.

* **Available community resources.** These include the American Heart Association, the American Lung Association, the American Cancer Society, the March of Dimes, and state and local health departments.

* **Discussions with workers and management.** "What programs do people want and why?" asks Randolph. "Is there an employee-based committee to provide input into wellness programs?"

Are you compliant with genetic screening law?

The Genetic Information Nondiscrimination Act of 2008 (GINA), which prohibits discrimination against a job applicant or employee based on the individual's genetic information, as well as the improper acquisition or use of such information, has important implications for occupational health.

"You will need to review and revise policies in light of this development," says **Kathleen Liever**, an Employment Law Associate at Fowler White Boggs in Tampa, FL.

Although GINA is designed to work in conjunction with a variety of other federal employment laws, including the Health Insurance Portability and Accountability Act (HIPAA), the Americans with Disabilities Act (ADA), the Occupational Safety and Health Administration, and the Family and Medical Leave Act, the way you comply with these laws will need to be modified to some extent, says Liever.

For example, employers conducting post-offer medical examinations, medical exams during employment, and fitness for duty exams, all of which are allowed under the ADA, will no longer be able to inquire about family medical history.

Employers still may conduct these tests and may obtain medical information, but not genetic information. "However, family medical histories are commonly interspersed in medical records," says Liever. "Because there is no practical way for physicians or hospitals to omit non-genetic information, employers will likely continue to receive medical records in their entirety."

If genetic information is obtained, even inadvertently, an employer must now comply with GINA's confidentiality and disclosure requirements. "In addition, employment decisions may now be challenged on the basis that an employer came into possession of such information and then made an adverse employment decision," says Liever.

EXECUTIVE SUMMARY

Occupational health policies need to be revised to comply with the Genetic Information Nondiscrimination Act of 2008. Make these changes:

- Update workplace posters and employee handbooks.
- Review wellness programs to ensure they're compliant.
- Store documents with employee genetic information in a confidential medical file.

Make these changes to comply with GINA

Kathleen Liever, an Employment Law Associate at Fowler White Boggs in Tampa, FL, says that you should take these steps now to comply with the Genetic Information Nondiscrimination Act (GINA) of 2008::

- **Update workplace posters.** The Equal Employment Opportunity Commission (EEOC) has revised its "Equal Employment Opportunity is the Law" poster. Employers needing an updated poster can find a copy on the EEOC's website. (http://www.eeoc.gov/posterform.html).
- **Revise equal employment opportunity policies, discrimination and harassment policies, and employee handbooks to include "genetic information" as a protected class**.
- **Monitor your group healthcare plan to assure that it will be in compliance.** "GINA provides for plan sponsor liability," warns Liever. "This includes reviewing wellness programs to ensure they're in compliance. It may require the elimination of any incentives from health risk assessment activities."
- **Review employee files for documents that contain genetic information about an employee.** "Store those records in the same manner as all medical documents submitted for ADA purposes, in a confidential medical file," says Liever.
- **Train supervisors, managers, and any other employees who handle FMLA and ADA-related matters about GINA's prohibitions and requirements.** "Be especially specific about provisions which generally prohibit deliberate acquisition of genetic information," says Liever.
- **Examine employment forms, especially any requests for medical records or information, to make sure they don't request genetic information.**
- **Review all policies and practices concerning medical inquiries of employees and applicants.** Include FMLA, workers' compensation, and ADA-related inquiries, and modify these policies as necessary to reflect all GINA requirements.

"For example, whenever requesting an employee to have medical professionals provide documentation in connection with a fitness-for-duty exam, make it clear that family medical history and other genetic information should not be provided," says Liever.

SOURCE

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Likewise, employers conducting genetic testing to monitor the biological effects of toxic substances in the workplace must comply with GINA by providing written notice to employees who are tested and making the test results available to employees.

Overlapping coverage

Liever says to "be alert for overlapping coverage of major laws," such as the ADA, FMLA, GINA, HIPAA, workers' compensation, and analogous state laws. "The interplay between the ADA and GINA will likely result in lawsuits alleging multiple and overlapping claims," she explains.

GINA prohibits discrimination based on the possibility that someone will acquire a condition in the future. The ADA protects individuals who currently have impairments or who are perceived as having impairments, if they meet the definition of "disability."

"The expanded definition of "disability" under ADA makes it far less likely that individuals will be without protection under either statute," says Liever. **(See related story on changes to make now, p. 55.)** ■

To protect patients, test viral load of infected HCWs

SHEA guidelines for HCWs infected with HIV, HBV, HCV

Do some health care workers infected with HIV or hepatitis B or C pose a risk to their patients? Should they be restricted from performing exposure-prone procedures? A new guideline from the Society for Healthcare Epidemiology of America (SHEA) seeks to answer these longstanding and controversial questions by specifically targeting health care workers with a high viral load of circulating virus

The SHEA guideline identifies the most exposure-prone procedures and specifies how and why some health care workers should face restrictions.

The precautions range from double-gloving and other safety measures to an outright restriction on performing certain exposure-prone procedures if they have a high viral load — defined as equal to or greater than 104 genome equivalents per milliliter of blood for HBV and HCV and equal to or greater than 5x102 genome equivalents per milliliter of blood for HIV.[1]

In a precedent-setting position, the SHEA guideline also suggests that health care workers infected with hepatitis B or C or HIV should be tested at least every six months to determine their viral load. All infected health care workers would consult an Expert Review Panel, comply with infection control precautions, and follow up regularly with occupational medicine staff or public health clinicians, the guideline states.

However, in what some say is a glaring omission, the guideline does not address routine testing of surgeons and other OR personnel, except to say that testing should not be mandatory and that health care workers performing invasive, exposure-prone procedures are "ethically obligated" to know their status.

The guideline represents an update of the 1997 SHEA guideline, "Management of Healthcare Workers Infected with Hepatitis B Virus, Hepatitis C Virus, Human Immunodeficiency Virus and Other Bloodborne Pathogens."

The Centers for Disease Control and Prevention guideline dates from 1991 and covers only HBV and HIV. However, the scientific understanding and treatment of HIV and hepatitis B and C have advanced considerably in the past two decades.

"We felt the science had progressed to the point where we really could define [these] issues — define the points where there was minimal risk to the patient while still allowing infected providers to pursue their livelihood," says **Neil Fishman**, MD, director of health care epidemiology, infection prevention and control at the University of Pennsylvania Health System in Philadelphia, an author of the guideline and president of SHEA. "The primary viewpoint was [the dictum of patient safety], 'Above all, do no harm.'"

In that regard, SHEA urges healthcare providers to comply with institutional policies and procedures designed to protect patients. Healthcare providers have an ethical responsibility to promote their own health and well-being, and a responsibility to remove themselves from care situations if it is clear that there is a significant risk to patients despite appropriate preventive measures, the guideline states.

However, infection with a bloodborne pathogen does not itself justify restriction on the practice of an otherwise competent healthcare provider, SHEA notes in the guideline. Healthcare providers infected with bloodborne pathogens should seek ongoing care and treatment. Restrictions may be justifiably imposed when a healthcare provider has a physical or mental impairment that affects his or her judgment and/or jeopardizes patient safety. Examples might include exudative lesions or weeping dermatitis; a history of poor infection-control technique or adherence to proper technique; mental confusion; or

a prior incident of transmitting a bloodborne pathogen to a patient, the guideline states.

Janine Jagger, PhD, MPH, director of the International Health Care Worker Safety Center at the University of Virginia in Charlottesville, affirms that it is not necessary to sacrifice patient health and safety to spare healthcare workers' practice rights. With advances in the treatment and prophylaxis of HBV, HCV and HIV, there are new opportunities for policies that protect both patient and healthcare worker, she notes. It is essential for surgeons to be fully engaged with the policy process, she says.

"Today, it is no longer in the interest of surgeons not to know their bloodborne pathogen status — although some may still need to be convinced of that," she says.

HCV viral levels 'arbitrary'

The guideline drew criticism both for what it contains and what it does not. Its authors readily acknowledge that it does not follow the usual rigorous standards of scientific evidence. In fact, the authors note that the cut-off levels of viral load are "arbitrary." HCV research and experience, in particular, provides little basis for a specific value, they say: "This level was chosen in the absence of data that definitively associate a given level with either a clear risk for transmission or, more importantly, an absence of risk."

"There will never be a randomized control study of the risk of transmission of hepatitis B, hepatitis C or HIV. For ethical reasons, that could never happen," explains Fishman, who is also associate professor of medicine in the Division of Infectious Diseases at the University of Pennsylvania. However, there is evidence of a relationship between greater "circulating viral burden" and a higher risk of transmission, the guideline states.

In the United States, HBV transmission has been associated with e antigen-positive status. However, the SHEA guideline notes a report from the United Kingdom in which health care providers were infected with a "pre-core" mutant of HBV that caused them to be e antigen negative but to have a high viral load.[2]

The authors note that the restrictions in Europe are greater for HBV and HIV than those recommended in the SHEA guideline. (The European Consortium could not reach consensus on HCV infected providers.) The United Kingdom guideline states that HCV-infected providers with circulating RNA should not conduct exposure-prone procedures.

In contrast, the current CDC guideline states that health care workers who are HIV-positive or HBV-positive with the e antigen (Hear) "should not perform exposure-prone procedures unless they have sought counsel from an expert review panel and been advised under what circumstances, if any, they may continue to perform these procedures." It does not cite specific procedures as exposure-prone or recommend any specific action on the part of the expert review panels.[3]

"We did review all of the European guidelines. But we felt that the evidence that was available did not support the European recommendations, that they were a little out of date," Fishman says.

Yet without data to support a cut-off level — in which transmission occurs more frequently above the cutoff than below it — the recommendation for viral load status for hepatitis C is problematic, says **Miriam J. Alter**, PhD, an HCV expert and director of the Infectious Disease Epidemiology Program at the Institute for Human Infections and Immunity at the University of Texas Medical Branch at Galveston.

"It's very hard to defend a policy in which the data are so lacking unless you're choosing zero risk, and this is not what this [guideline] is choosing," says Alter, who is also the Robert E. Shope Professor in Infectious Disease Epidemiology.

Most cases of HCV transmission in the United States have been linked to contamination of multidose vials, reuse of syringes, or medication abuse (and needle-sharing) on the part of the health care worker. In one case, a Long Island, NY, surgeon infected 14 of 937 patients over a 10-year period. Investigations of five HCV-infected providers in the United Kingdom found 15 probable cases of transmission to patients among 5,868 patients tested, or a transmission rate of about .26%.[4]

Transmission risk is higher from HBV-positive individuals who are also e-antigen positive — which corresponds to a higher viral load. Alter cautions that the viral load can vary, and that facilities need to consistently use the same test for viral load because of possible variations among those of different manufacturers.

And what about patients? Should they be informed of their surgeon's HBV, HCV or HIV status? SHEA states that infected health care workers should not be required to inform patients of their infection status. Fishman notes that the SHEA panel included an ethicist. "We did consider the ethics of the recommendations and situations," he says. The guideline also was reviewed by representatives of the American College of Surgeons and the American College of Occupational and Environmental Medicine, he says.

SHEA identifies invasive, exposure-prone procedures

New guidelines for the Society for Healthcare Epidemiology of America (SHEA) for health care workers infected with bloodborne viruses include the following procedures at greatest risk of transmission to patients.[1]

Category III: Procedures for which there is definite risk of bloodborne virus transmission or that have been classified previously as "exposure-prone"

- General surgery, including nephrectomy, small bowel resection, cholecystectomy, subtotal thyroidectomy other elective open abdominal surgery
- General oral surgery, including surgical extractions, hard and soft tissue biopsy (if more extensive and/or having difficult access for suturing), apicoectomy, root amputation, gingivectomy, periodontal curettage, mucogingival and osseous surgery, alveoplasty or alveoectomy, and endosseous implant surgery guideline on HCWs infected with HBV, HCV, and/or HIV
- Cardiothoracic surgery, including valve replacement, coronary artery bypass grafting, other bypass surgery, heart transplantation, repair of congenital heart defects, thymectomy, and open-lung biopsy
- Open extensive head and neck surgery involving bones, including oncological procedures
- Neurosurgery, including craniotomy, other intracranial procedures, and open-spine surgery
- Non-elective procedures performed in the emergency department, including open resuscitation efforts, deep suturing to arrest hemorrhage, and internal cardiac massage
- Obstetrical/gynecological surgery, including cesarean delivery, hysterectomy, forceps delivery, episiotomy, cone biopsy, and ovarian cyst removal, and other transvaginal obstetrical and gynecological procedures involving hand-guided sharps
- Orthopedic procedures, including total knee arthroplasty, total hip arthroplasty, major joint replacement surgery, open spine surgery, and open pelvic surgery
- Extensive plastic surgery, including extensive cosmetic procedures (eg, abdominoplasty and thoracoplasty)
- Transplantation surgery (except skin and corneal transplantation)
- Trauma surgery, including open head injuries, facial and jaw fracture reductions, extensive soft-tissue trauma, and ophthalmic trauma
- Interactions with patients in situations during which the risk of the patient biting the physician is significant; for example, interactions with violent patients or patients experiencing an epileptic seizure
- Any open surgical procedure with a duration of more than three hours, probably necessitating glove change.

REFERENCE

1. Henderson DK, et al. SHEA guideline for management of health care workers who are infected with hepatitis B virus, hepatitis C virus, and/or human immunodeficiency virus. *Infect Control Hosp Epidemiol* 2010; 31:203-232

No mandate for HCW testing?

The guideline relies on health care workers to report their status. Yet if health care workers don't know their HIV, HBV or HCV status, there is no opportunity to consider restrictions. The guideline states that health care providers performing the most exposure-prone procedures are "ethically obligated" to know their status, and that any provider who inadvertently exposes a patient to his or her blood or body fluid should notify the patient and undergo testing.

Still, in the absence of specific recommendations for testing — either at hire or periodically — the health care provider may avoid the issue altogether. Both SHEA and CDC recommend against mandatory testing of health care providers. This position hasn't changed, although in 2006, CDC recommended that all HIV testing should be routine for patients "in all health care settings."[5]

The guideline advocates strict adherence to infection control practices. Yet there has been relatively low compliance with sharps safety practices and devices in U.S. operating rooms, says **Jane Perry**, MA, associate director of the International Healthcare Worker Safety Center at the University of Virginia. According to 2007 data from the EPINet (Exposure Prevention Information Network) surveillance, more sharps injuries occur in the OR than any other hospital locale and 24% of all injuries are from suture needles.

Perry also notes that surgeons have the highest under-reporting rate of sharps injuries and blood exposures in most studies. Promoting safe practices and encouraging reporting of bloodborne pathogen exposures is important for institutions and all health care workers involved in exposure-prone procedures, says Fishman. "It's critical that the various institutions have mechanisms in place to survey adherence to safe practices by all providers," he says.

Jagger favors a proactive approach: "It all hinges on accurate reporting of percutaneous injuries during surgical procedures. Institutions need to develop mandatory reporting policies specifically for the OR with rigorous administrative checks. Only then will patients benefit from the same post-exposure proto-

col that is offered by law to blood-exposed health-care workers."

(The SHEA guideline is available at: www.shea-online.org/Assets/files/guidelines/BBPathogen_GL.pdf) ■

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1. Henderson DK, et al. SHEA guideline for management of health care workers who are infected with hepatitis B virus, hepatitis C virus, and/ or human immunodeficiency virus. *Infect Control Hosp Epidemiol* 2010;31:203-232.
2. Perry JL, Pearson RD, and Jagger J. Infected health care workers and patient safety: A double standard. *Am J Infect Control* 2006;33:299-303.
3. Incident Investigation Teams and others. Transmission of hepatitis B to patients from four infected surgeons without hepatitis B e antigen. *N Engl J Med* 1997;336:178–184.
4. Centers for Disease Control and Prevention. Recommendations for preventing transmission of human immunodeficiency virus and hepatitis B virus to patients during exposure-prone invasive procedures. *MMWR* 1991; 40:1–9.
5. Centers for Disease Control and Prevention. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *MMWR* 2006;55:1-17.

CNE OBJECTIVES / INSTRUCTIONS

The CNE 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.

PAPRs end frustration of fit-test failures

Hospital diverts funds to reusables

At DuBois (PA) Regional Medical Center, employees were failing N95 fit tests in alarming numbers. In the cardiology department, about 46% of employees failed fit-tests — even after trying a variety of models and sizes. Things weren't much better in anesthesia (35%), cardiovascular ICU (34%), or the emergency department (26%).

The most important number — the one that prompted the hospital to switch to powered air-purifying respirators (PAPRs) — was the cost: about $37,000, mostly in loss of productivity of clinicians who had to spend an average of 35 minutes to complete a fit-test.

By comparison, the investment in PAPRs and education cost about $38,000, including about $5,000 for education — the only annual cost.

"We were investing a significant time commitment and money every year, and the [fit-test] failure rates were higher than we were comfortable with," says **Sue Miller**, RN, COHN-S/CM, director of employee health at DuBois.

Fortuitously, DuBois made the transition to PAPRs in 2008, a year before hospitals were faced with the novel H1N1 strain of influenza. That reinforced the benefits of reusable respirators, as the hospital avoided the scramble for supplies and massive fit-testing efforts.

"For us, it was a good return on investment. It made our life so much easier during the crisis," says Miller. "I'm definitely very happy we went with this solution." ■

COMING IN FUTURE MONTHS

- Cut injuries with mentoring program
- Take charge right when a crisis occurs
- Put impressive numbers in front of leaders
- Avoid violations of patient privacy regs

CNE QUESTIONS

17. Which is true regarding efforts to reduce workers' compensation costs?
A. The injured workers' past medical history and social factors can help you to understand hidden worker's compensation cost drivers.
B. Litigation costs should never be considered as part of worker's compensation costs.
C. Factors such as an injured worker's job dissatisfaction is not relevant.
D. Incentive programs for decreased reporting of injuries are effective, especially for cumulative trauma injuries.

18. Which is recommended regarding participation in wellness programs?
A. If participation is poor, asking employees who did attend to evaluate the program is not beneficial.
B. Cost/benefit analyses should be done only for large groups, not if there are only a few participants.
C. A cost benefit can be calculated for every success involving an employee's lifestyle change.
D. You should avoid asking for executive support or additional incentives if participation is poor to begin with.

19. When surveying employees about wellness programs, which is recommended?
A. Do lengthy surveys even if it means more time is required to complete them.
B. Have a well-known leader send out the survey.
C. Don't make results confidential unless the employee specifically requests this.
D. Offer employees programs that are currently unavailable so you can assess the need for these, even if it's very unlikely these will be implemented.

20. Which is required regarding compliance with the Genetic Information Nondiscrimination Act of 2008?
A. Employers conducting medical examinations during employment are required to ask about family medical history.
B. If genetic information is obtained inadvertently, confidentiality and discovery requirements do not apply.
C. It is still acceptable to request genetic information in employment forms.
D. Employers conducting post-offer medical examinations, medical exams during employment, and fitness for duty exams, will no longer be able to inquire about family medical history.

Answers: 17. A; 18. C; 19. B; 20. D.

Occupational Health Management

2010 Reader Survey

In an effort to learn more about the professionals who read *Occupational Health Management*, we are conducting this reader survey. The results will be used to enhance the content and format of this publication.

Instructions: Mark your answers by filling in the appropriate bubbles. Please write your answers to the open-ended questions in the space provided. Return the questionnaire in the enclosed postage-paid envelope by **July 1, 2010**.

1. How would you describe your satisfaction with *Occupational Health Management*?

○ A. very satisfied ○ B. somewhat satisfied ○ C. somewhat dissatisfied ○ D. very dissatisfied

Please rate your level of satisfaction with the following:

	A. excellent	B. good	C. fair	D. poor
2. quality of newsletter	○ A	○ B	○ C	○ D
3. article selections	○ A	○ B	○ C	○ D
4. timeliness	○ A	○ B	○ C	○ D
5. length of newsletter	○ A	○ B	○ C	○ D
6. overall value	○ A	○ B	○ C	○ D
7. customer service	○ A	○ B	○ C	○ D

8. What do you like most about *OHM*? _____

_____

_____

9. What do you like least about *OHM*? _____

_____

_____

10. What issues would you like to see addressed in *OHM*? _____

_____

_____

11. *Occupational Health Management* has been approved for 15 nursing contact hours using a 60-minute contact hour by the American Nurses Credentialing Center's Commission on Accreditation. If you participate in this CNE activity, how many hours do you spend in the activity each year? _____

Questions 12-16 ask about coverage of various topics in *Occupational Health Management*.

	A. very useful	B. fairly useful	C. not very useful	D. not at all useful
12. OSHA compliance	O A	O B	O C	O D
13. ergonomic issues	O A	O B	O C	O D
14. workers' compensation	O A	O B	O C	O D
15. wellness programs	O A	O B	O C	O D
16. return-to-work programs	O A	O B	O C	O D

17. Do you plan to renew your subscription to *Occupational Health Management*?

O A. yes O B. no If no, why not? _____

18. What is your title? (Please choose the title that most reflects your position and responsibilities):

O A. occupational health director/manager/coordinator
O B. occupational health nurse
O C. medical director
O D. employee health/safety manager
O E. other (please specify) _____

Please indicate yes or no for all of the areas for which you are responsible for occupational health in your facility or system.

19. occupational health O A. yes O B. no
20. infection control O A. yes O B. no
21. workers' compensation O A. yes O B. no
22. OSHA compliance O A. yes O B. no
23. disability O A. yes O B. no
24. other (please specify) _____

25. From where do you most frequently get your continuing education contact hours?

O A. hospital provided
O B. travel off-site to live conferences
O C. subscription-based newsletters/journals
O D. outside-sponsored teleconferences
O E. other (please specify) _____

26. List the top three challenges you face in your job today: _____

_____

_____

27. To what other publications or information sources about occupational health do you subscribe? _____

_____

_____

28. Including OHM, which publication or information source do you find most useful, and why? _____

_____

_____

Contact information _____

_____