Occupational Health Management™

A monthly advisory for occupational health programs

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INSIDE

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Zero tolerance may not be best solution to workplace violence

Expert suggests employees better served with training

The idea of workplace violence is unsettling to employers, employees, and occupational health professionals. Often, the first reaction by anyone in those groups would be to maintain zero tolerance for violent behavior at work.

But according to **W. Barry Nixon**, SPHR, executive director of the National Institute for Prevention of Workplace Violence, enforcing a zero tolerance policy might not be the best option for employers or workers.

"I am not an advocate of zero tolerance policies, because they tend to be reactionary in nature," he says. "A zero tolerance policy says, 'If this happens, here's what we do,' but I prefer a zero incidence plan of progressive prevention.

"Zero incidence plans incorporate zero tolerance, but not as the sole solution to every problem," Nixon adds.

What's often missing in reaction-oriented zero tolerance policies, he explains, is the component of prevention.

Violence can erupt at any work site

According to NIOSH, every year between 1993 through 1999, an average of 1.7 million people were victims of violent crime while working or on duty in the United States. An estimated 1.3 million (75%) of these incidents were simple assaults, while an additional 19% were aggravated assaults. Of the occupations examined, police officers, corrections officers, and taxi drivers were victimized at the highest rates. (Data available at www.cdc.gov/niosh/injury/traumaviolence.html.)

The American Nursing Association (ANA), citing its own research, reports that nearly a half-million nurses per year reported that they were victims of violent crimes in the workplace.

But NIOSH suggests that almost any work site can be the scene of violence by or toward employees. Some risk factors include:

- contact with the public;
- exchange of money;
- delivery of passengers, goods, or services;
- a mobile workplace such as a taxicab or police cruiser;

• contact with unstable or volatile people in health care, social service, or criminal justice settings;
• working alone or in small numbers;
• working late at night or during early morning hours;
• working in high-crime areas;
• guarding valuable property or possessions;
• working in community-based settings.

Nixon points out that while some work sites, such as emergency departments within hospitals, are easier than others to segregate potentially violent people and secure other areas, other work sites are accessible to anyone who walks in.

"That's why the focus should not be so much on what to do when violence happens at the workplace, but how to prevent incidents from occurring and remove risks," he says.

The most important step, and the first one, that occupational health and safety managers should take toward prevention of violence at the workplace is to make sure there is a well-written violence prevention policy in place, and that it's not only in place, but also that it's implemented and enforced, Nixon explains.

Risk assessment should be part of developing a policy, he continues, so that health and safety managers can know where the site's areas of potential risk are. Risk assessment involves both physical examination of the site, plus input from employees about what they are concerned about. **(See The NIX Model for Managing Workplace Violence, p. 111.)**

Assessment of the organization, installation of security measures to the physical site, and development of relationships with law enforcement, mental health, and other individuals and services that could assist the organization during a crisis are other components of the NIX system for managing workplace violence.

The final step is to fill employees in on the planning process and what they can expect from the program, supervisors, occupational health nurse, and management.

"The occupational health nurse can play an important role in making sure managers are aware of what are commonly known as warning signs, and in communicating information to managers and employees," says Nixon.

"People need to be educated, to know what to do if they recognize the signs. For supervisors, that also includes instruction on how to intervene properly and to know what their action plan should be if they recognize signs of problems. For employees, that action plan would probably be to report to their supervisor, occupational health nurse, or human resources office."

This brings up why zero tolerance policies are problematic and why many employers are moving away from them. "People hear that certain behaviors are not acceptable and there is zero tolerance — that that employee will be terminated, for example."

But what often happens, Nixon says, is that the behavior that is unacceptable is *not* deemed cause for termination. A zero tolerance policy can mandate termination for any verbal threat of physical harm, for example, but if a verbal threat proves to be essentially groundless and the employee is simply reprimanded, other employees might feel the company is selectively enforcing its own policy.

The occupational health nurse should participate in the prevention preparation that hopefully might

(Continued on page 112)

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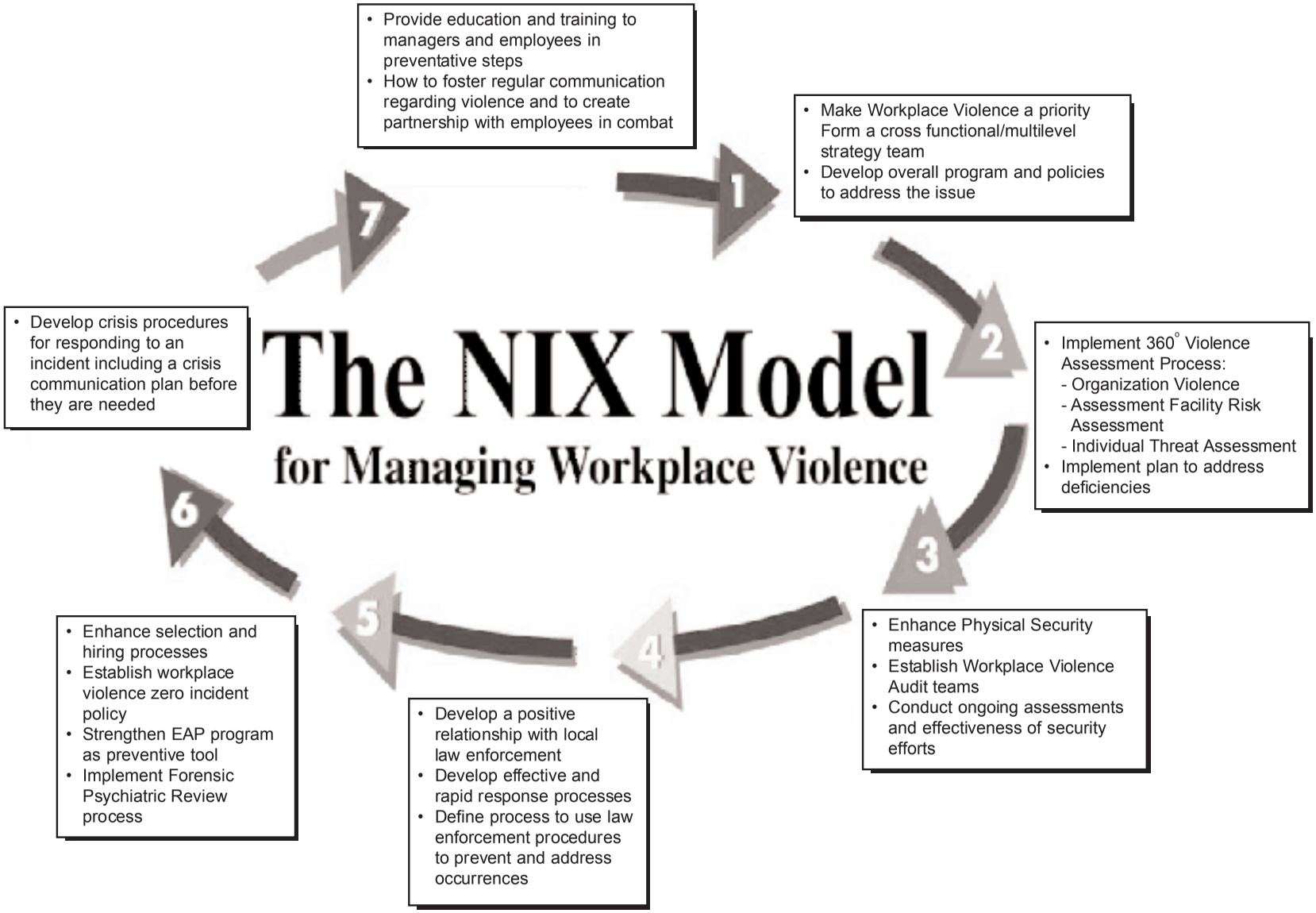

Source: National Institute for the Prevention of Workplace Violence, Lake Forest, CA.

prevent an incident of violence. While there is far less control to be had over violence that comes into the workplace from outside, other than physical security barriers, tending to the employees within the company provides a chance to address problems before violence erupts.

"There should be effective background checks during the hiring process, to screen for potentially violent people," says Nixon. But past history doesn't always reveal who might or might not become violent when three variables come together.

"For an incident to be more likely, first you have to have an individual who has a propensity toward violence — a violence-prone person who thinks violence is a way to solve problems," he explains.

"Second, there is a triggering event. It can be something that happens outside the workplace or at work that causes a person an extreme amount of stress — an ill loved one, a divorce, or being fired or penalized at work.

"And the third variable is how the company responds to an individual who they recognize is at risk. That is the one factor the organization has control over," Nixon adds.

While an employer can't control a person's propensity toward violence (particularly if it has not manifested itself), nor often have any influence on the triggering event, he says occupational health, risk management, and co-workers recognizing the signs of trouble and responding appropriately could be the difference between resolving the problem and a tragedy.

The most common signs, according to widely available Federal Bureau of Investigation advisories, include changes in mood, personal hardships, mental health issues (e.g., depression, anxiety), negative behavior (e.g., untrustworthy, lying, bad attitude), verbal threats, and past history of violence.

While human resources and safety managers can easily access information on the warning signs of workplace violence, a study by AAOHN in 2003 indicates that the majority of workers surveyed don't know how to recognize warning signs.

"AAOHN's study found that nearly 20% of the entire work force claimed they have experienced an episode of workplace violence firsthand, yet the majority still do not know what to look for when it comes to determining potential offender characteristics," according to AOHN president **Susan A. Randolph**, MSN, RN, COHN-S, FAAOHN. "These findings alone define a significant need for companies to commit to and implement workplace violence education and prevention programs. Without employee education, a company will be far less able to diffuse a potential violent situation before it arises."

"If you have an employee who is acting increasingly hostile, or they exhibit a number of signs indicating to you that something is wrong, that's when appropriate action is key," he continues. A supervisor, occupational health nurse, or human resources contact should take care not to apply his or her own feelings about the source of the stress as a means of measuring risk; Nixon says what might seem inconsequential to one person could be a major source of stress to another.

When prevention fails

If, despite best efforts, an episode of workplace violence occurs, the management aspect of the employer's plan is tested. Before this happens, the nurse should be familiar with the company's employee assistance program (EAP) and resources in the community that can be called on quickly to assist.

"Make sure your EAP is tied into a community network and that there's someone identified in advance who can do critical incidence debriefing and can help people manage so that they are not traumatized," Nixon suggests.

Steps taken at this time, as well as preventative steps that the company undertook, can protect the employer from liability if employees sue. If an employee complains of another employee's violent behavior, the employer must conduct an investigation and take preventative steps to remedy the situation and document the entire process. If there are threats made by a domestic partner to hurt an employee at work, employers should take action to protect the employee and others by increasing security as necessary.

Whether an employer is liable for an incident of domestic violence that occurs in the workplace will depend on the facts of the case, but when a violent incident occurs between co-workers or workers and customers, companies may be liable for if a supervisor knew about assaults, potential assaults, or harassment and failed to take appropriate action.

Nixon advises that the best way to train employees to respond to a perceived or real threat of violence at work is to have a plan for prevention and management fully developed, and then do a good job of educating and training the employees.

"In my model [the NIX model], training and

education are the final step, and that's based on the premise that you've done all the other things necessary to create the plan that you need, and now you're ready to fully train your supervisors and employees on it," he explains. "A lot of organizations go from Step 1, assessment, to Step 2, training."

Training employees to recognize and deal with violence is different from other safety training, because the human factors make it more unpredictable than other occupational accidents.

"Workplace violence is not a random safety violation carried out by a process or machine, but by a walking, thinking person," he says. "Your response has to be thought out and can vary depending on the location and situation.

"If you have someone coming in with a gun, for example, it might seem that evacuating the building is the logical step. But it might be the worst thing you could do, because if evacuating everyone to the parking lot is the procedure during other emergencies, then the person with the gun might know that everyone is now concentrated in one place, in the parking lot."

Because health care workers typically have multiple contacts each day, often with people walking in off the street who might be dealing with tremendous stress, Nixon developed a list of seven things employees at health care facilities should know about violence in the workplace:

• Adapt and completely accept the paradigm that violence is *not* a part of the job. At the same time, accept the fact that the chance of you being exposed to workplace violence is very real. Refuse to accept that becoming a victim is inevitable because most incidents of workplace violence are preventable if your organization and employees take the necessary steps to prevent it.

• Read your organization's workplace violence prevention policy and understand the definition of workplace violence and its components.

• Make a commitment to know, understand, and recognize the potential warning signs or at-risk behaviors that individuals frequently demonstrate prior to an incident of workplace violence.

• Make a commitment to get training in workplace violence prevention.

• Take responsibility for your own safety and security at work. Report any and all concerns to the designated company representative, such as an occupational health and safety professional or human resource or security manager. Don't let peer pressure, a code of silence, belief that management will not take action, or anything else prevent you from taking steps to protect yourself. If you recognize that a colleague is exhibiting at-risk behavior, report it.

• As an employee, report any concerns about unsafe work conditions, breaches of your security policies, or environmental or organizational conditions that may contribute to workplace violence to your human resources representative, security, or occupational health professional.

• If your organization has a process for identifying high-risk patients and flagging charts or records of patients with a history of violence, make sure you understand them and take precautionary steps to protect yourself. Never dismiss them as unnecessary or not applicable (based on your experience with the person). If your organization does not have a process, work with human resources, security, or occupational health and safety professionals to develop one.

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• ***American Association of Occupational Health Nurses**, 2920 Brandywine Road, Suite 100, Atlanta, GA 30341. Phone: (770) 455-7757. The AAOHN workplace violence survey report is available on-line at www.aaohn.org.*

• ***American Nurses Association**,* ANA's Workplace Violence: Can You Close the Door? *available by calling (800) 274-4ANA.*

• **Occupational Safety and Health Administration Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers**, *OSHA 3148-1996. Available on-line at www.osha.gov/Publications/osha3148.pdf.]* ■

Occ-health nurses have a role in terror planning

Proper preparation reduces stress

Thousands of Americans died in the 2001 terrorist attacks on New York and Washington, DC; anthrax threatened postal workers and elected officials the following year; and recently, London's mass transit system was rocked by explosions. Terrorism is a safety consideration at workplaces in the United States now, but how do

you prepare your work force for what one expert calls "a nameless, faceless enemy"?

Occupational health nurses, in the current climate of terrorist activity in the West, must consider how to prepare and, when possible, protect their work forces from terrorist threats.

"Every nurse has to be prepared in case of disaster," says **Joanne Langan**, PhD, an assistant professor of nursing at Saint Louis (MO) University Doisy College of Health Science. "Nurses will be sought out for information no matter where they are. Nurses will play key roles in disaster relief whether they work full time, part time, or at home in their communities."

Langan's colleague, **Dotti James**, PhD, an associate professor of nursing at Doisy College, says the terror attacks in London show "how unexpected it is and how important it is for nurses to prepare."

James and Langan wrote "Preparing Nurses for Disaster Management" after the Sept. 11 terrorist attacks, after they realized there was no single place for nurses to go for comprehensive information about what to do during a terror incident or disaster.

They also started a first-of-its-kind certificate program at Saint Louis University, preparing nurses across the country to handle the aftermath of a terror attack. They had traveled to Israel to see how nurses there deal with similar disasters, and used that experience in their book and curriculum.

"What happened in London is an example of a well coordinated, nonbiological attack, and nurses around the world must be prepared for their new role — take the lead in caring for victims when disaster strikes," says James.

Occ-health nurses stepping up

While emergency and trauma nurses were immediately at the focus of disaster preparation awareness following the Sept. 11 attacks, occupational health nurses have since been identified as important participants in preparation.

Pamela Aaltonen, MS, RN, assistant professor of nursing at Purdue University and a director of the Indiana Public Health Association, says the state public health association has been working on plans for educating the public on hazards relating to terrorism and has identified occupational health nurses as key players in protecting the public at work.

The effects of war and terrorist activity can vary widely. Workers in industries that already have been hit with terrorist attacks may experience constant worry for their safety. Those employed in companies with international ties may feel their businesses are vulnerable. Chemical manufacturers, large power plants, and work sites with thousands of employees concentrated in one location may feel they are likely targets.

Steps taken to protect employees and workplaces can even create fear, one expert says, if the implementation creates an impression that there is heightened danger behind the protective measures.

"Preparing and educating employees makes them prepared, and done properly, you avoid paranoia," explains **Paul Viollis**, PhD, a risk control strategist in Melbourne, FL.

"But if you don't educate people properly, you send them into a frenzy. If you don't tell them what they need to be concerned with, exactly, you will create more paranoia," he adds.

One responsibility of occupational health nurses in a time of heightened precautions, however, is to make sure that everyday worker health and safety doesn't get lost in the scramble to protect against terrorist threats, says **Barry S. Levy**, MD, MPH, of Sherborn, MA-based Barry S. Levy Associates.

"Preventive measures in response to terrorist attacks or threats need to be designed and administered in a fair and scientifically based manner," Levy says. "Inordinate attention to future terrorist threats may lead to the shifting of human and financial resources away from addressing important occupational health and safety problems."

Neil Boris, MD, associate professor of psychiatry at Tulane University Health Sciences Center in New Orleans, concurs. "Educating employees about heightened threats while keeping them focused on their work and routine workplace safety is an effective way of reducing the stress that fear and increased security can bring."

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Civilian occ-health nurses protect those who serve

Variety, exotic locales draw nurses into military

Reducing lost workdays, advising on repetitive motion injuries; some aspects of occupational health nursing are universal. But when the repetitive motion injury affects a Navy sailor getting ready to deploy, or the worker losing work days is a Marine in Bahrain, the work can get interesting.

The U.S. Navy's occupational health nursing program began in 1985, and employs mostly civilian nurses who come to the Navy as seasoned nurses.

Lori O'Berry, senior occupational health nurse consultant at the Navy Environmental Health Center (NEHC) in Portsmouth, VA, spent about 15 years as an orthopedic, neurosurgical, and emergency medicine nurse before she was hired by the Navy. About 15 years later, she says the job has provided her with experiences not always found in civilian workplaces.

"My first job as an occupational health nurse was at [the U.S. Naval Base at] Guantanamo Bay, Cuba," she says.

Working side by side with military nurses

The Navy occupational health nursing program is made up of about 120 nurses, all of whom are civilians. Though active duty Navy nurses work collaboratively with the civilian occupational health nurses, the Navy has no active duty occ-health nurses, she says.

Occ-health nurses apply for Navy employment through the Navy civilian human resources web site (www.chart.donhr.navy.mil). The on-line application is followed by a pre-placement exam and an interview.

"A lot of them are experienced nurses when they come in, but maybe they don't come into the field already in the [occupational health] specialty," she explains. "They may have years of clinical experience."

Nurses who want to join the occupational health nurse program must already have occupational health nurse education, but continuing education opportunities abound. The 45th Navy Occupational Health and Preventive Medicine Conference, scheduled for March 2006, provides a week of conferences and continuing education tuition-free for Navy occ-health nurses. Space allowing, non-Navy civilian occ-health nurses are allowed to register for the conference, as well (www-nehc.med.navy.mil/conference06). The conference focuses on military medical readiness, deployment health, and technology advances.

Covering the globe

Navy occupational health nurses are stationed throughout the world to care for Navy and Marine personnel, but do not deploy. But O'Berry says the role of Navy occ-health nurses is critical to the pre- and post-deployment process, whether it's making sure deployed service members are prepared for their missions or monitoring the safety and health of reservists who backfill the positions left behind by deployed personnel.

"The Navy covers the globe, and so does occupational health," she says. "One of our jobs is to keep the Navy work force, including active duty, civilian, and contract workers, healthy, and to help the Navy provide a safe and healthful workplace for its employees."

While some of the patient contacts that a Navy occ-health nurses have are the same as those seen in any other workplace, Berry says the variety of encounters she has makes the job interesting.

"When there's an occupational health clinic in a shipyard, which is heavy industry, you will have patient contacts that you'd see in heavy industry. But there are also administrative workers, so you have a wide range of patient contacts, whereas [contacts seen in a civilian setting] may tend to be more focused," she explains.

That variety, coupled with the opportunity for international placement, makes the job appealing to the nurses in the Navy occupational health program. "You meet lot of people, you get to see a lot, and that's part of the fun of occupational health nursing — being able to go to a work site and see what people do, then going back to the clinic and making informed decisions about the employees' health and safety," she relates.

During periods of conflict, the nurses' role changes a little, Berry says, as they help get personnel ready to be deployed overseas and reservists ready to take over at home.

"Now that we're in a peacekeeping role in Iraq, there are more civilians being deployed along with the active duty personnel, so we have had to change our practice to get civilians ready to deploy with the active duty personnel." ■

Gaining weight at work? Job may be to blame

Study ties desk jobs, technology to obesity

Weight-loss programs have long been staples of work site wellness programs, but they take on additional importance if findings of an Australian research team are correct — that some jobs themselves might contribute to obesity.

The researchers at Queensland University in Australia, in findings published in the August issue of *American Journal of Preventive Medicine*,[1] found sedentary office work may be a contributing factor to obesity. They studied almost 1,600 male and female full-time office workers, 25% of whom are sedentary for more than six hours each day.

They determined that on-the-job sitting time was independently associated with overweight and obesity in men who were in full-time paid work, but say further research is needed to understand the association between sitting time and overweight and obesity in women.

The Queensland researchers say sitting for long periods of time may increase the risk of obesity by as much as 68%, and promoting physical activity at work is recommended to prevent lost productivity as a result of obesity and related diseases.

"One of the major immediate and long-term health issues in modern society is the problem of overweight and obesity," says **W. Kerry Mummery**, MD, one of the researchers and lead author of the study. "These results suggest that the workplace may play an important role in the growing problem of overweight and obesity."

Work-weight link under study

A prime suspect in the impact of work on Americans' weight is the technology that makes jobs easier and more productive. Computers, e-mail, conference calls, and fax machines make it possible for someone to work an entire day without leaving his or her chair. According to the Centers for Disease Control and Prevention, approximately two-thirds of Americans are overweight, and almost one-third are obese.

Business leaders are becoming increasingly aware of the human and economic burden that poor health imposes on their workers and their companies' competitiveness. Many employers have invested in health promotion and disease prevention programs aimed at reducing prevalence of obesity in their organizations and providing a supportive environment for employees who want to improve their health.

The University of Georgia Workplace Health Group (WHG) is taking a $4.5 million grant from the National Heart, Lung, and Blood Institute, and will use it to design and test workplace interventions aimed at weight management and obesity prevention. **Mark Wilson**, one of the WHG researchers, says the project "emphasizes the use of environmental modifications and supports to help people manage their diet and weight."

The American Association of Occupational Health Nurses (AAOHN) released study findings in 2004 that support the idea that work is an ideal setting for programs that help employees control their weight. The AAOHN survey found that nearly half of survey respondents who participated in workplace weight management programs say they were successful in reaching and maintaining their goals.

Respondents to the AAOHN survey say the activities that they use most include on-site visits by health and wellness professionals (38%), gym memberships (23%), educational programs such as health series or seminars (16%), diets with outlined goals (14%), and on-site exercise classes (13%).

Based on the survey, AAOHN developed some guidelines to help companies create and implement successful workplace weight management programs, including:

- Management should actively promote the program and take an interest in success and outcomes.
- Getting employees involved at the very beginning is crucial to making the program successful; obtaining input from a diverse group of individuals (including fit employees as well as overweight and obese workers) is key to having a program that reflects the employee population.
- Promoting programs as often as possible helps ensure consistent participation.
- Enlisting a trained health and wellness professional, like an occupational and environmental health nurse or health consultant, brings credibility to the program and helps to ensure that all employees are participating in a healthy manner.
- Encouraging employees to participate in programs together fosters a team atmosphere.
- Sharing success stories motivates employees and shows management that the program works.

Reference

1. Mummery WK, Schofield GM, Steele R, et al. Occupational sitting time and overweight and obesity in Australian workers. *Am J Prevent Med* 2005; 29:91-97.

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Business travel can pose health risks

ACOEM offers air travel checklist

Every day, millions of Americans travel via air for business or pleasure, but few are aware of the health risks that can be caused by flying, from the merely uncomfortable (dry eyes) to the life-threatening (cardiac events), especially for those with underlying health conditions.

Because air travel is such an important part of American business, the American College of Occupational and Environmental Medicine (ACOEM), which issues a checklist each Labor Day on a health topic that affects worker health and workplace safety, has created a list of pre-flight planning tips and recommendations for traveling. **(See tips, p. 118.)**

"This list addresses the most common health and medical issues that impact air passengers during their flight," reports **Thomas B. Faulkner**, MD, MHA, FACOEM, a member of the ACOEM board of directors who also serves as medical director for Atlanta-based Delta Airlines. Faulkner assisted in developing the *Medical Tips for Air Travel* checklist.

Frequent travelers should know that taking some precautions before flying can make travel not only more comfortable, but can ward off adverse health complications.

Uncomfortable effects of cabin pressure such as dry eyes and skin are unavoidable, but they can be minimized. For example, contact lens wearers might consider using moisturizing eye drops or wearing glasses instead, to lessen the effects of dry air. Moisturizers and lip balm can relieve dry skin.

Faulkner says air on commercial airlines "is very, very clean air," but when the person in the next seat has a cold and cough, germs can be unavoidable.

Travelers might avoid unwanted bacteria in drinking water by requesting water in sealed bottles; according to ACOEM, a recent environmental Protection Agency (EPA) study found bacteria in the water on both domestic and international aircraft. Ice, usually purchased from vendors who are required to meet strict hygiene standards, generally is safe on domestic flights.

Travelers with certain health conditions should take additional precautions before flying. Anyone with heart or lung conditions should check with a physician before flying, as pressurized cabins cause lower oxygen saturation in the body.

"You do feel fatigued when you fly, and that's because when you're at altitude, you desaturate; the oxygen in your blood may go down from 98% to 92%. It's like going from sea level to an 8,000-foot mountaintop," Faulkner explains. Certain cardiac and respiratory conditions can cause more serious desaturation.

Pregnant women, too, should get clearance from their physicians before flying; diabetics may need physician input on adjusting their medications if they fly across multiple time zones.

Recent surgery may be a contraindication to flying. Again, the passenger should check with his or her physician to ensure there is no increased risk of deep vein thrombosis (DVT), but Faulkner stresses that evidence indicates it's not air travel that increases the risk of DVT, but the long periods of immobility.

"It's important to stretch, flex your arms, and get up and walk around if possible," says Faulkner.

If health conditions require air travel be postponed or canceled, airlines may refund airfare if the passenger provides a note from his or her physician.

If the flight is unavoidable, the traveler should contact his or her physician to ask about what precautions to take. Frequent travelers who have health conditions that might affect travel should find out ahead of time what the airline's policy is on traveling while ill and traveling when medical assistance is needed; some airlines require physician documentation for ailing patients before they fly.

The Labor Day checklist for 2005, and for all years since 1996, is available on-line at www.ACOEM.org. ■

ACOEM's Tips for Healthy Air Travel

PRE-FLIGHT MEASURES

Medical cautionary measures: *Due to the effects of air cabin pressure (equivalent to being 5,000 to 8,000 feet above sea level), the body's oxygen saturation percentage drops 6-8 points in a pressurized cabin. Less cabin pressure results in less oxygen — this can be a problem for those who suffer from heart and/or lung disorders.*

- Speak to a physician if you have a history of cardiac or pulmonary disease or cancer.
- If you've had surgery, including eye or oral/dental, within the last month, check with your physician prior to flying.
- If you wear contact lenses, consider wearing glasses during the flight, or using commercially available lubricating eye drops, as reduced cabin humidity can cause eye irritation.
- If you have a cold or an infection — particularly ear, nose, and/or sinus infections — cancel your flight. Congestion can lead to pain, bleeding, and possibly a ruptured eardrum or sinus damage.
- If you are pregnant, check with your physician before flying.
- If you are diabetic, discuss what adjustments to make to your medication schedule if you are flying across multiple time zones.
- It is dangerous to fly immediately after scuba diving. If you have been scuba diving, wait 12-24 hours (depending on the depths and number of dives performed) before flying.

Medications

- Place all medication(s) — both prescription and over-the-counter — and any medical supplies (insulin syringes) in a carry-on bag. Not only will they be less likely to be lost, but they will not be exposed to temperature changes that occur in the cargo/storage area.
- Bring a copy of the prescription and your physician's contact information with you in case the medication is lost or stolen. Also, know the generic names of all your medications as brand names can vary.
- Carry medications in the original bottles to help avoid security issues.
- Take along extra medication(s) in case the return trip is delayed.

Personal habits

- Drink fluids before and during your flight to avoid dehydration.
- Limit your alcohol intake at least 24 hours before flying, particularly if you suffer from motion sickness.

DURING FLIGHT

Drinking and eating

- Avoid alcohol and caffeine, which can contribute to dehydration. Drink plenty of fluids (aim for 8 ounces per hour). Water and fruit juices are best.
- Request only bottled water or canned beverages, especially if you have a suppressed immune system.
- Eat lightly.

Sleeping

- Sleep on the plane to avoid jet lag.
- Do not use an airline provided-blanket or pillow unless it is in a sealed package, to avoid germs on a previously used item.

Exercise

- Flex and rotate your neck, back, shoulders, and ankles every 20-30 minutes to avoid stiffness. If sitting for more than 30 minutes, get up slowly; blood may have pooled, which can cause dizziness upon sudden standing.
- Take a walk around the cabin every hour or two if flight safety permits.
- If you are pregnant, request an aisle seat and walk about the plane when this is permitted during flight. Place the seatbelt low on your pelvis to avoid fetal injury.

Illness

- If the person next to you is coughing, request to be moved if possible.

Source: American College of Occupational and Environmental Medicine, Elk Grove Village, IL.

Long hours increase risk of illness and injury

Affects both safe and risky professions

Workdays longer than 12 hours put workers at increased risk of injury and illness, regardless of how hazardous the job is or how long their commute is to and from work.

That's what a study by the University of Massachusetts (UMass) Medical School Center for Health Policy and Research found. More than half of the 5,100 injuries and illnesses found in the 11,000 people surveyed occurred during extended working hours or overtime. After adjusting for age, gender, type of industry, and job, employees working overtime were 61% more likely to sustain a work-related injury or illness than employees who did not work overtime, according to **Allard E. Dembe**, ScD, co-director of the doctoral program in occupational health services research at UMass and Harvard in Boston.

Further analysis indicated that the increased risks were not merely the result of demanding work schedules being concentrated in inherently "riskier" industries or jobs, Dembe says.

The principal findings of the study, Dembe says, include:

- Working in jobs with schedules that routinely involve overtime work or extended hours increases the risk of suffering an occupational injury or illness.
- Overtime schedules had the greatest relative risk of occupational injury or illness, followed by schedules with extended (>12) hours per day and extended (>60) hours per week.
- The risk of injury was found to increase with the increasing length of the work schedule, even after controlling for the entire amount of working time spent "at risk" for injury.
- Multivariate analyses indicated that the increased injury risks are not merely the result of the demanding work schedules being concentrated in riskier occupations or industries.
- Results are consistent with the hypothesis that long working hours indirectly precipitate workplace accidents by inducing fatigue or stress in affected workers.

The authors say their findings back up the theory that long working hours indirectly precipitate workplace accidents by inducing fatigue and stress. And they support government initiatives, such as those espoused by the European Union, to cut working hours.

"Strategies for preventing workplace injuries and illnesses should include changes in work organization and job design, addressing the length of work schedules and the performance of overtime work," says Dembe.

The report on the UMass study, "The impact of overtime and long work hours occupational injuries and illnesses: new evidence from the United States," appears in the August 2005 issue of *Occupational and Environmental Medicine* and is available at http://press.psprings.co.uk/oem/september/588_om16667.pdf. ■

Surprise! OSHA plans 4,400 unannounced visits

Some 4,400 workplaces deemed "high hazard" will receive unannounced comprehensive inspections from the Occupational Safety and Health Administration (OSHA) during fiscal year 2005-2006. OSHA announced in August its 2005 site-specific targeting (SST) plan will focus on approximately 4,400 high-hazard work sites for unannounced comprehensive inspections over the coming year.

Over the past seven years, OSHA has used an SST inspection program based on injury and

COMING IN FUTURE MONTHS

- OHNs can offer valuable support to workers facing end-of-life decisions
- Four years after 9/11, Ground Zero still is a lingering health risk
- Employers finding creative ways to make expectant moms' work more pleasant and healthy
- Tele-health — OHNs can be a phone call away

illness data; this year's program is based on data surveys from 2004, drawn from approximately 80,000 employers' injury and illness numbers.

The 2005-2006 program will initially cover about 4,400 individual work sites on the primary list that reported 12 or more injuries or illnesses resulting in days away from work, restricted work activity, or job transfer for every 100 full-time workers (known as the DART rate). OSHA will again inspect nursing homes and personal care facilities, but only the highest 50% rated establishments will be included on the primary list. The agency also will randomly select and inspect about 400 workplaces (with 75 or more employees) across the nation that reported low injury and illness rates for the purpose of reviewing the actual degree of compliance with OSHA requirements. Finally, the agency will include on the primary list some establishments that did not respond to the 2004 data survey. ■

CE objectives

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 attendance.
- **Identify** employee health trends and issues.
- **Comply** with OSHA and other federal regulations regarding employee health and safety. ■

CE *questions*

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 **December** issue and return it in the reply envelope provided in order to receive a certificate of completion. When your evaluation is received, a certificate will be mailed to you.

13. The NIX model for managing workplace violence calls for educating employees about their company's workplace violence assessment and policy:
A. during the assessment phase.
B. while the policy is being hammered out.
C. after the assessment and policy making steps are complete.
D. upon request.

14. According to risk control strategist Paul Viollis, properly educating employees on how to deal with disasters and terrorism could make them feel:
A. fearful.
B. prepared.
C. paranoid.
D. all of the above

15. Air travel has been conclusively linked to which of the following health events?
A. Deep-vein thrombosis
B. Illness from germs dispersed through the ventilation system
C. Blood-oxygen desaturation
D. None of the above

16. In a study examining risks associated with extended hours and overtime, researchers found that workers in high-risk jobs were more prone to illness and accident while working longer hours than workers in low-risk jobs.
A. True
B. False

Answers: 13. C; 14. B; 15. C; 16. B.