AMERICAN HEALTH CONSULTANTS®

Occupational Health Management™

A monthly advisory for occupational health programs

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JANUARY 2002
VOL. 12, NO. 1 (pages 1-12)
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Larger firms forced to take a new look at threat of bioterrorism

Recent events cast doubt on disaster plans

A significant number of large corporations in the United States already had complex disaster plans in place when the "War on Terror" began, and most included a bioterrorism component.

But as recent events suggest, not all possibilities had been anticipated by these plans. So, as mystery continues to shroud the cause of several deadly anthrax cases, companies across the country are going back to the drawing boards — and occupational health professionals are helping them.

"This has been a dominant part of my life for the last several weeks," says **William B. Patterson**, MD, MPH, FACOEM, chair of the medical policy board at OH+R in Wilmington, MA, noting "more interest on the part of all employers." (OH+R's clients include Phillips Medical Systems, AGFA, several large hotel chains, and the U.S. Postal Service.)

"We've had one very large employer so concerned about bioterrorism that they've paid our physicians to come into their worksites and provide one-hour employee education and question-and-answer programs," Patterson reports. "We're developing the ability to have nonphysicians go in as well; it's an advantage of being part of a large company that we have the resources that can pull it all together in a professional way."

"Some corporations had plans set up that they thought were good, but as a result of these recent events, everybody is reassessing," adds **Charles Prezzia**, MD, MPH, FRSM, general manager, health

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COMING IN FUTURE ISSUES

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services and medical director of USX/US Steel Group in Pittsburgh. "The whole anthrax issue has to be interpreted within the context of bioterrorism, which is now a very real threat. People are looking at the whole aspect of communications and emergency response on a corporate level, as opposed to the plant level."

"What I see is a heightened awareness for both security and health care," says **Virginia Lepping**, RN, MBA, COHN, executive vice president of Providence Occupational Health Services in Granite City, IL. "One company I spoke to today said it has tight security when it comes to trade secrets, but now it is more concerned about disgruntled employees, and controlling and knowing everyone who comes into the facility and the purpose for their visits."

Program built with partners

OH+R, which has 42 offices in nine states, is currently running employer seminars in all of those areas that are labeled "terrorism and disaster preparedness" programs. These programs are implemented in partnership with local hospitals and organizations or departments of public health. Typically lasting about two to three hours, they are presented to audiences of around 200. "We are getting excellent employer response," says Patterson.

The programs, whose main focus is to train managers, stress two main issues — what needs to be done to prepare ahead of time for disaster and terrorism, and what you need to do in the first 10 - 15 minutes if there is a disaster. "Mostly, this involves making decisions such as whether to evacuate, and if so, how to do it in a controlled way so as not to lose the ability to account for everyone," notes Patterson. "Do you need to isolate people? Do you need to turn off the HVAC [heating, ventilation and air conditioning] system to prevent the spread of spores? Do you send in your HazMat team, or is it too dangerous?"

In addition to educating staff about the scientific basics of bioterrorism, the program covers chemical events. It also stresses preventive measures. "This includes what we do in the mailroom, where we generally follow the recommendations of the [Centers for Disease Control and Prevention (CDC)], and we also stress issues like reminding employees not to carry suspicious letters into the hospital," Patterson notes.

The OH+R program also includes a component

on stress. "We point out some very good critical incident stress management materials on the ACOEM [American College of Occupational and Emergency Medicine] web site, as well as on the CDC's," Patterson says, noting that "a lot of what we present is in the pubic domain, but we bring to the table the ability to synthesize the information and put it on a level for managers, not physicians. We bring perspective to the information and then we add our own input."

The multi-discipline panel also conducts a "Q & A" session, lasting anywhere from 30 minutes to one hour. "Typically, the panels will have one or two infectious disease/public health experts, and former military personnel experienced in chemical and biological warfare," says Patterson.

"A number of the programs have also had local emergency medical services representatives or fire department administrators who can really talk to employers and tell them what they need to know. And of course, there are occ-med professionals. My own view is that occupational health physicians have the most experience with risk communication and equipment decisionmaking, and are in an ideal position to engage in this kind of discussion," adds Patterson.

The multidisciplined approach

Prezzia also is a strong supporter of the multidisciplined approach. "You have to get the relevant players from each department," he insists. "Within our corporation and within the occupational health profession, from my own perspective and from being with other medical directors, this situation calls for a cross-disciplinary approach involving medical, safety, industrial hygiene, security, legal, and human resources."

Prezzia combines this structure with careful attention to how the information is presented. "In essence, you don't want employees to panic, but you want to be sure they get the appropriate information," he says.

AT USX/USS Steel, that information includes how to evaluate a threat, who to notify, and how to respond. "We are extensively using our Intranet as well as e-mail notification," notes Prezzia. "Depending on what occurs, we need to have more rapid responses; this could include cell phones, pagers, any form of communication that is fast."

Prezzia and his staff are also helping employees empower themselves by continually updating relevant information about the CDC, Federal Bureau of Investigation, Postal Service, and Occupational Safety and Health Administration (OSHA) web sites. "We've also taken videotapes of CDC conferences and sent them out to our medical departments for research as well as to let them know what's currently taking place," he explains.

The company also is addressing the emotional impact of the anthrax attacks. "We have an employee assistance professional [EAP] here that reports to me," notes Prezzia. "We have onsite counselors at every significant plant we have, as well as an 800 number and on-line coverage through Ceridian."

The firm's governmental affairs office in Washington, DC, was directly serviced by the Brentwood postal facility (where two employees died after exposure) and is located near the Pentagon, so the company's EAP conducted a critical stress incident briefing. "With a critical stress incident we use small group debriefings, then one-on-one sessions depending on the event," Prezzia explains. "After the anthrax scares, we also had to have an assessment done by a reputable industrial hygiene group and respond to employee concerns in terms of prophylaxis."

Improve communications

Lepping has noted a call for improved communications by local firms in the last several weeks. "I've called around to a couple of larger companies," she says. "The medical center has an areawide plan that incorporates bioterrorism, but we are identifying available resources and channels of communications. With local workplaces, we are making sure they have a communications plan set up with health services and fire departments in their areas."

Companies that deal with hazardous materials may already have those communication links set up, she notes. "If something out of the ordinary occurs, be it symptomatic or just the observation of something unusual regardless of the source of the problem, these links would still be involved."

She's also concerned about protecting staff. "We need security support for the nursing staff; if an area becomes contaminated, we want to make sure it is controlled until the authorities can reach it," she explains.

In that vein, adds Lepping, OSHA will soon have some new resources available on its web site (www.osha.gov). "These will include a full set of guidelines on anthrax; protective equipment, how to instruct employees, and signs and symptoms,"

she says. "Outside of the military, anthrax is something the typical nurse in occupational health doesn't come in contact with. That being the case, some of them need to be reintroduced to these diseases. We've done that with our ER and occ-health staffs, both nurses and physicians."

Interestingly, she notes, her group has not yet received specific requests from local firms to present on-site bioterrorism programs. "But we *have* had a lot of companies come in here for information, and we have a contract with the postal service, so we feel it is inevitable that someone will have that concern. That's part of why we're training our staff to recognize signs and symptoms — to support any employee coming in with them."

It is evident from these and other responses that not all employers have "gotten it" yet, says Patterson. "For example, a lot of factories and large buildings have not done adequate evacuation preparation," he notes. "What made the biggest difference in the World Trade Center was evacuation preparedness and effectiveness. There are certain basics every employer ought to follow, and it is our job to remind them of those basics."

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Workplaces play key role in terrorism war

During its recent conclave in Seattle, officials of the Arlington Heights, IL-based American College of Occupational and Environmental Medicine (ACOEM) noted that the anthrax attacks on workers at the U.S. Capitol, U.S. Postal Service and media buildings "clearly demonstrate that the American workplace is a critical front line in America's new war against terrorism."

To help win the war, the ACOEM is calling upon federal, state, and local health authorities to recognize the workplace as an essential resource and an increasingly important component of the public health system.

"Recent events suggest the importance of rethinking and expanding our systems for protecting the public from potential health problems," said ACOEM president **Dean A. Grove**, MD, at the College's recent State-of-the-Art Conference (SOTAC). "The deaths of postal workers in Washington, DC, and newspaper workers in Florida, clearly demonstrate that — in the event of health emergencies such as those we have recently experienced — our national and local health care systems need to strengthen, incorporate, collaborate with, and utilize the resources of America's workplaces. This is especially important because the attacks are occurring in and around those very workplaces."

The war against terrorism is being fought not only on battlefields, but also in corporate mailrooms, federal buildings, and epidemiological laboratories — all territories familiar to the nation's occupational and environmental medicine physicians notes the ACOEM. The skills and experience these physicians provide in the prevention, detection, and management of individual diseases and injury are an important part of America's integrated response to terrorism.

When workplaces are targeted, the health care system must be able to offer services to people where they work, says the ACOEM. One logical response to a mass event is to strengthen the ability of the workplace itself to respond. For example, some worksites and occupational health clinics can be made available for community testing and inoculations. Occupational and environmental physicians, with training in epidemiology, toxicology, and clinical medicine, are well prepared to supplement the important work and needs of local public health authorities.

"Occupational health clinics and other worksite-oriented health care systems are a ready-made and economical system of providing medical care," said Grove. "These systems are not only first responders, but in many communities they are already part of the public health program. Recognizing them as an integral piece of a broad public health system can immeasurably improve our collective ability to protect vital workplaces and to respond to terrorist attacks on our health, safety and environment."

The more than 400 physicians attending the conference adopted an agenda for change and improvement that includes:

• Encouraging public health authorities and occupational health professionals to work together to find new and creative ways to more formally coordinate available worksite resources into community disaster planning and response systems.

• Developing ways to increase employers' understanding of what is needed for detection and response in the event of a terrorist attack or threat, and providing access to qualified and comprehensive management services for workplace health risks.

• Creating programs that educate employees about possible threats and teach them how to recognize health dangers.

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Yoga helps employees deal with 9/11 aftermath

Relaxation techniques help relieve stress

A New York City-based wellness consulting firm has helped the city's workers cope with the emotional stress of the events of Sept. 11 by offering yoga classes free of charge. The workshops, which entail a program called "Yoga at Your Desktop," are provided by Fitness Plus Inc.

"Since Sept. 11, people are dealing with so much stress and the sense that things are out of their control," notes **Nancy Burstein**, president of Fitness Plus Inc. "We can't change the stressors, but we *can* change how we respond to them. You can control your breath, and once you do, you are more able to be focused in a way that's positive and productive for you."

A clear impact on health

The events of Sept. 11 have had a palpable impact on employee health, notes **Penny Merkel**, RN, nurse manager at the advertising company Ogilvy & Mather, which recently participated in the Fitness Plus program. "We have seen a definite increase in the symptoms of anxiety, distress, and post traumatic stress syndrome; it's absolutely impacted employee productivity and quality of life," she says. "You're also dealing with the advertising world, which is dependent on the economy. I think there was an increased need for people to have more tools accessible to them."

"People have had different reactions to the stress at this time," adds Burstein. "Many have had sleep issues, migraines and other headaches, stomach and back problems. In addition, people have found themselves staring at the computer screen, or not sleeping, which clearly affects productivity. You can turn to smoking, drinking, or overeating, but the question is what can you do that's positive health wise? Yoga can start to release the tension through its postures."

A natural evolution

Fitness Plus Inc. has been offering fitness programs and yoga classes for nearly 20 years; "Yoga at Your Desktop" evolved naturally from those existing programs. "It takes the principles of yoga and applies them to almost any situation," Burstein explains. "You don't have to change clothes, or get on the floor. It incorporates breathing techniques and basic postures to open and stretch the muscles, and then a deep relaxation that's very similar to a meditation. We show you how to take these techniques and use them at your desk, while commuting, or at home."

The sessions are run by certified yoga instructors. They start with breathing — an awareness of breath and how we breathe and the acknowledgement that most of us only use the upper third of our lungs when we breathe "normally." "Through the technique of the 'complete breath' you can take oxygen to the base of your lungs, oxygenate the blood and bring energy to the body," explains Burstein. "Then, you exhale with thoughtfulness and consciousness."

From there, the session proceeds to some simple postures and stretches. "You do the breathing during each exercise," Burstein notes, "Because the basis of all yoga is the breath." **(For a description of the "complete breath" and these stretching exercises, see the box on p. 6.)**

Program well received

The program has been so popular that at one workplace, registration had to be closed at 100, says Burstein. "The response has been extremely

Yoga At Your Desk Tipsheet

The principles of yoga can be practiced anywhere and anytime. The following breath exercise and stretches can be performed at your desk to help you relax and release stress, lengthen tight muscles, and increase energy.

Complete Breath

1. Inhale deeply through your nose. Let the air fill the bottom of the lungs first (your abdomen will expand), then the middle of the lungs (your ribcage area), and finally the top of the lungs (your sternum will rise).

2. When you reach your full inhalation, hold your breath for a count of three and then begin a controlled exhalation. Release the air from the top of the lungs, the middle of the lungs and the bottom of the lungs. The breath should be one continuous flow from inhalation to full exhalation.

3. To gain further control of the breath, try to make your exhalation twice as long as the inhalation. For example, you can inhale to the count of three, hold the breath for three counts, and exhale to the count of six.

Stretches/Relaxers at Your Desk

1. Neck stretch: Turn head to the right, gently lower chin to the shoulder, and make a half-circle to the left shoulder. Reverse to the right.

2. Shoulder rolls: Roll your shoulders forward and backward in a smooth, circular motion.

3. Upper back stretch: Place hands on shoulders (elbows are lifted) and try to bring elbows together in front of chest as head drops forward.

4. Chest stretch: Clasp hands behind head and press elbows back.

5. Shoulder stretch: Clasp hands behind your back and slowly straighten your elbows.

6. Side stretch: Place right hand on right edge of chair seat and lift left arm to ceiling. Slowly lean to the right. Change arms and reverse sides.

7. Spinal twist: Place both hands on right armrest. Turn torso and head to the right. Hold the stretch and reverse sides.

8. Back relaxer: Gently round the torso over the legs (your chest may rest on your thighs). Slowly restack the spine to return to an upright position.

Source: Fitness Plus Inc., New York City.

positive," she observes. "You see people leaving the workshop saying, 'I didn't know I could feel like this.'"

"The program was excellent," Merkel adds. "It was user-friendly, it was relevant, and it was simple to access."

Burstein notes that programs like this could even benefit workers who live hundreds or thousands of miles away from "Ground Zero."

"Without question they can be helpful," she asserts. "Even before Sept. 11, with our economy hurting and people not knowing what was going to happen, there was just a very high level of stress. We don't know if a tiger is coming to attack us or our boss is coming to fire us, but we prepare [through stress] because we're not physically fighting off the tiger anymore. To physically discharge the energy your body produces is critical. There are a variety of routes; you need to find one that works for you."

Merkel agrees. "I think it would be erroneous to feel that one's safety is threatened merely by one's geography," she says. "I talk to people with EAP (Employee Assistance Program) systems across the country, and they've all been activated and actively used."

Speaking of EAPs, Merkel says she is offering a variety of programs to help employees cope. "We had some group counseling sessions through our EAP immediately after Sept. 11, and we then offered confidential one on one sessions as well," she recalls.

Altruism can also be therapeutic, Merkel notes. "There was a great outpouring of employees asking what they could do to help," she says. "We 'adopted' a firehouse down the street from us, and we also put together an extra blood drive for December. The other half of dealing with stress is helping employees to not feel quite as helpless."

At Olgivy & Mather, other stress-reduction strategies had already been in place before Sept. 11. "We offer chair massages twice a week; they're fully booked," Merkel says. "But all of these recent events have created for me a sense of urgency to set next year's agenda on stress management."

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Worker/caregivers face stress from all sides

Health of 'sandwich generation' at risk

They have come to be known as the "sandwich generation"' Caught between the demands of college-age children and aging parents, members of this subgroup of baby boomers are buffeted by continual pressures as parent and caregiver. When these caregivers are also workers, it can be a recipe for disaster.

And the problem will only get worse. "Just look at the basic demographics; we've got the boomers on the edge of the aging cycle and their kids are having children later in life than the boomers did, and of course there are fewer 'X-ers' than boomers, so there are fewer family members available to provide care," notes **Suzanne Mintz**, president and co-founder of the Kensington, MD-based National Family Caregivers Association, a grass-roots organization created "to educate, support, empower, and speak up for America's family caregivers."

"Some projections done back in 1996 show a declining ratio of available caregivers aged 50 - 64 to those who need care (aged 85 and older), from 11 to 1 in 1990, to 4 to 1 by 2050," Mintz adds. [1]

The stress for those individuals who must also work is considerable, she notes, "Because on top of the stresses of just being a two-income family, or trying to balance the needs of the workplace and the needs of family, you have a whole other person being cared for — and that person is not well, and may or may not even live with you."

Although nobody teaches us to be parents, we all know where to go for help, Mintz notes, and we have parents and neighbors to whom we can turn. "But to know what to do with family care giving is very much trial and error," she explains. "Although the resources are out there they are very hard to find, since you're dealing with a situation so outside the norm."

Impact on employee health

Situations such as those faced by family caregivers are bound to have workplace ramifications, says **Myrl Weinberg**, president of the Washington, DC-based National Health Council, a nonprofit umbrella group that has 114 national health related organizations as its members. The group's core constituency consists of 50 leading patient-based organizations such as the American Cancer Society and the American Diabetes Association.

"Clearly there are physical and psychological impacts for workers who take care of kids at home as well as spouses and parents," says Weinberg. "What we have found is that they are incredibly stressed. What their employers provide or do not provide [in terms of benefits] has made a big difference. If there are no benefits, these employees are not as productive as they could be. Some have had to turn down promotions, or have actually quit their jobs because they couldn't do both."

"We all hear about the repercussions of stress, and in some of these cases it can be extreme stress," adds Mintz. "Depression levels tend to be high, there is sleeplessness, back problems, and other stress-related ailments. There have also been studies that show that caregivers with high stress levels will heal more slowly. The stress of care giving can have an impact on literally every part of your life, and can impact not only your ability to be a good caregiver, but your ability to be a good worker."

In addition, says Mintz, there are financial stresses. "The Family Medical Leave Act [FMLA] is great, but not everyone can afford to use it [the FMLA provides only for *nonpaid* leave]," Mintz points out. "Yet, caregiving families spend more than twice as much on out-of-pocket medical expenses than noncare giving families." **(See factoids on the impact of care giving, p. 8.)**

Toolkit offers solutions

The good news, says Weinberg, is that there are strategies available to employers that can significantly reduce the stresses of care giving on working adults — and many of them require little or no financial outlay.

"I have served as chair of a Workplace Task Force which has examined the issues of family care giving for the Last Acts organization," she notes. "We developed a toolkit, which can be found on their web site (www.lastacts.org)."

The toolkit is divided into no-cost, low-cost, moderate, and high-cost initiates, and includes illustrations of model activities. "It even includes sample memos for informing employees about an upcoming seminar," says Weinstein.

One of the no-cost solutions is to make absolutely sure the employer's benefits are

examined as to how they may apply to caregivers — and then inform the employees. "There's often a clear gap of knowledge about what's in those benefits that could be used in a flexible manner," Weinstein asserts.

A second no-cost solution: Have known, publicized flexible time schedules. "During the core hours you can have your people there, but give them the flexibility to take a family member to the doctor, as long as their total hours are still the same," Weinstein explains.

One low-cost solution would be employee leave pools. "You can create a pool of vacation or sick time that will be available for caregivers to use," says Weinstein. "Individual employees may be allowed to donate to that pool."

It's also critically important to be able to offer workers some counseling assistance, either through an employee assistance program) or by hiring a full-time care coordinator, Weinstein advises. (This would be classified as a moderate-cost initiative.) "The care coordinators provide one-stop shopping for employees looking to find the right services," she offers.

In the high-cost category are strategies such as providing paid leave for the family care giver. "A smaller employer might consider implementing the FMLA and then extending it," Weinstein suggests. "Or, you could provide long-term health care insurance."

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*[Editor's note: The Workplace Task Force toolkit is available in print form, and will also be available on CD-ROM. Call: **Shawn Zelman** or **Anna Bauer** at Barksdale Ballard, (703) 827-8771.]*

Reference

1. Chronic Care in America: A 21st Century Challenge. The Institute For Health and Aging, University of California at San Francisco for The Robert Wood Johnson Foundation. San Francisco;1996. ■

Family Caregiving Factoids:

There is $11.4 billion in lost productivity due to care giving each year.
— Metropolitan Life

There are currently (1997) more than 23 million, or one in four workers, providing some level of care to family members.
— The National Alliance for Caregiving and the American Association of Retired Persons

Approximately 30% of all workers have some responsibility to care for a family member. That will rise to 54% by 2008.
— U.S. Department of Labor

Portable defibrillators will help city workers

Hospital invests $40,000 for a dozen devices

Maine Medical Center in Portland will spend about $40,000 to buy one dozen automatic portable defibrillators to put in major locations around the city in an effort to reduce the rate of death from cardiac arrest. In addition to being placed in key venues such as the Portland Civic Center, they will also be located in the facilities of large employers around the city.

"We felt the efficacy of these devices in preventing deaths and resuscitating patients from cardiac arrest is so compelling that we should put them in areas where there was a high concentration of people, thus extending our cardiac care unit out into the community," says **Gus Lambrew**, MD, director of cardiology at Maine Medical.

Sudden cardiac arrest is a particular problem in rural states like Maine, where victims often have to be transported significant distances to reach a hospital. Because of challenges like these, the cardiac survival rate in Maine is lower than the national average.

"If you have an arrest, one foot can be too great a distance," says Lambrew. "What this tries to address is to reduce as much possible — even by minutes — the time it takes to receive assistance. This will even improve response time over and above what the rescue squad can provide."

Many of the defibrillators will be placed in corporate facilities, notes Lambrew. "The

Hanniford Brothers, a large employer, and Anthem Blue Cross/Blue Shield will get defibrillators for their headquarters buildings as well," he says.

Every individual in a workplace who will be responsible for using the defibrillators will receive some training from the medical center staff, says Lambrew. "And it can't be just one person at each location," he notes. "You need to have some backup — people who are trained in both in CPR and in defribrillation."

How many lives can these defibrillators save a year? "It's kind of hard to determine that unless you know what the baseline is," Lambrew concedes. "Some of that information is only now coming out in studies by the National Heart Institute. A large-scale study is also being done to determine the most effective place to have portable defibrillators."

However, the information currently available has more than convinced Lambrew this investment will be worthwhile. "We already know they work when you put them in a police car," he notes, "And in Rochester, MN, when first responders were provided with the devices, the rate of survival went up to about 20%." By comparison, he says, the survival rate in Seattle, where there is a well-organized system involving both the fire department and public CPR education, the rate is more than 17%.

Efforts are being made at the state level to support deployment of portable defibrillators in rural areas throughout Maine. Lambrew says he hopes his program will lead to a number of other hospital-sponsored programs, so that a real dent can be made in the rate of deaths from sudden cardiac arrest.

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Seeds of drug abuse planted in youth?

Cognitive skills in childhood may hold the key

Abusers of drugs and alcohol represent some of the greatest challenges faced by employers and occupational health professionals — from the standpoint of both discipline and behavioral health.

Now, a team of researchers from the University of Iowa, Iowa City, and Yale University, New Haven, CT, have discovered a potential new key to what causes drug abuse, and to which employees may present the greatest problems once they enter into a treatment program.

In a first-of-its-kind study, the researchers looked at the cognitive skills that chronic abusers possessed during childhood, as well as their current level of functioning. The data were based on fourth-grade scores on the Iowa Tests of Basic Skills. The drug abusers scored significantly lower than the control group of nonusers, and as adults, they performed even worse than would be expected, given the original gap between the two groups as children.

The results were shared in a poster presentation at the recently held annual meeting of the American Society of Anesthesiologists in New Orleans.

Examining the results

The researchers tested chronic abusers of alcohol, stimulants (cocaine or amphetamines), marijuana or users with problems with two or more drugs at about two to three weeks and again at 11 to 15 weeks after their last drug use. They tested the control group at the same intervals.

Drug abusers performed significantly worse than the controls on standard tests of reading comprehension, verbal express, mathematics, memory, concept formation and vocabulary. The stimulant users performed the worst of the three drug groups.

These findings may have significant implications in the workplace. "Drug abusers with lower cognitive skills may tend to wind up in treatment more," notes **Mohamed M. Ghoneim**, MD, one of the researchers. "Those in treatment may tend to get into more trouble with their employees, families and others."

"This is in the context of comparing drug users who are in treatment with the whole population of drug users; those who are in treatment are often those with the more severe problems," explains **Robert I. Block**, PhD, an associate professor in the department of anesthesia at the University of Iowa College of Medicine, and the

lead author of the study. "You may see poor or erratic job performance, missing work, being late to work, and so on."

Would Iowa Test scores, or those from similar examinations, be of value to employers in preemployment screening or evaluating potential and new employees? "I don't see any basis for that," says Block.

However, he adds, if employees end up in drug treatment there's a possibility that some types of treatment they might receive "could have some higher expectations of intellectual capacity than might be warranted." For example, he observes, if discussions are held with these employees there may be unrealistic expectations as to whether they will remember what was being talked about. "If there *is* cognitive impairment, they may not learn what they're really supposed to be learning," he asserts.

Accordingly, says Block, it might be wise when assessing employees in drug treatment to have some portion of that assessment include a testing of their cognitive ability, so that their treatment can guided by how impaired they may or may not be.

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Emergency management: What JCAHO expects

Standard EC.1.4 A plan addresses emergency management.

Intent of EC.1.4

The emergency management plan describes how the hospital will establish and maintain a program to ensure effective response to disasters or emergencies affecting the environment of care. The plan should address four phases of emergency management activities: mitigation, preparedness, response, and recovery.

The plan provides processes for:

A. Identifying specific procedures in response to a variety of disasters based on a hazard vulnerability analysis performed by the hospital.

B. Initiating the plan (including a description of how, when, and by whom the plan is activated);

C. Defining and, when appropriate, integrating the hospital's role with communitywide emergency response agencies (including the identification of who is in charge of what activities and when they are in charge) to promote interoperability between the hospital and the community.

D. Notifying external authorities of emergencies.

E. Notifying personnel when emergency response measures are initiated.

F. Identifying personnel during emergencies.

G. Assigning available personnel in emergencies to cover all necessary staff positions.

H. Managing the following during emergencies and disasters:

• patients' activities including scheduling, modifying, or discontinuing services, control of patient information, and patient transportation;

• staff activities (for example, housing, transportation, and incident stress debriefing);

• staff-family support activities;

• logistics of critical supplies (for example, pharmaceuticals, medical supplies, food supplies, linen supplies, water supplies);

• security (for example, access, crowd control, traffic control);

• interaction with the news media.

I. Evacuating the entire facility (both horizontally and, when applicable, vertically) when the environment cannot support adequate patient care and treatment.

J. Establishing an alternative care site(s) that has the capabilities to meet the clinical needs of patients when the environment cannot support adequate patient care including processes that address, when appropriate, management of patient necessities (for example, medications, medical records) to and from the alternative care site; patient tracking to and from the alternative care site, interfacility communication between the hospital and the alternative care site, or transportation of patients, staff, and equipment to the alternative care site.

K. Continuing and / or re-establishing operations following a disaster.

The plan identifies:

L. An alternative means of meeting essential building utility needs (for example, electricity, water, ventilation, fuel sources, medical gas / vacuum systems) when the hospital is designated by its emergency plan to provide continuous service during a disaster or emergency.

M. Backup internal and external communication systems in the event of failure during disasters

and emergencies.

N. Facilities for radioactive or chemical isolation and decontamination.

O. Alternate roles and responsibilities of personnel during emergencies, including who they report to within a command structure that is consistent with that used by the local community.

The plan establishes:

P. An orientation and education program for personnel who participate in implementing the emergency management plan. Education addresses specific roles and responsibilities during emergencies, the information and skills required to perform duties during emergencies, the backup communication system used during disasters and emergencies, and how supplies and equipment are obtained during disasters or emergencies.

Q. Ongoing monitoring of performance regarding actual or potential risk related to one or more of the following:

- staff knowledge and skills;
- level of staff participation;
- monitoring and inspection activities;
- emergency and incident reporting;
- inspection, preventive maintenance, and testing of equipment.

R. How an annual evaluation of the emergency management plan's objectives, scope, performance, and effectiveness will occur.

[For more information, contact:
***Joint Commission on Accreditation of Healthcare Organizations**, Oakbrook Terrace, IL. The standard is available on-line at www.jcaho.org/standard/ecer.html.]* ■

GERD impairs sleep, lowers productivity

Two recent studies presented at the 66th Annual Scientific Meeting of the American College of Gastroenterology in Las Vegas underscored the need to control the symptoms of gastroesophageal reflux disease (GERD).

Nimish Vakil, MD, and co-workers at the Sinai Samaritan Medical Center and the University of Wisconsin Medical School in Milwaukee studied the impact of GERD on interrupted sleep patterns in 101 patients.

"GERD is prevalent in patients with obstructive sleep apnea — the condition where people stop breathing for short periods when they're asleep. We wondered whether untreated GERD worsens sleep by causing spontaneous arousals during sleep," said Vakil. "We found that GERD patients on acid-suppressive therapy had half as many spontaneous arousals per hour as did untreated GERD patients. To improve sleep quality and reduce daytime sleepiness, we recommend treating GERD patients with acid suppressive therapy, such as proton pump inhibitors."

In another study, **Joshua Offman**, MD, MSHS of Cedars-Sinai Health System and Zynx Health Inc., in Los Angeles and colleagues interviewed 1,025 workers to assess the impact of chronic heartburn on absenteeism and worker productivity. They found a significant relationship between reduced quality of life from GERD symptoms and reduced worker productivity.

The researchers interviewed participants to determine quality of life, absenteeism, and worker

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

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Subscription rates: U.S.A., one year (12 issues), $435. Outside U.S., add $30 per year, total prepaid in U.S. funds. One to nine additional copies, $348 per year; 10 to 20 additional copies, $261 per year. For more than 20 copies, call customer service for special arrangements. Missing issues will be fulfilled by customer service free of charge when contacted within one month of the missing issue date. **Back issues**, when available, are $73 each. (GST registration number R128870672.)

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productivity. The analyses revealed that those with a low quality of life had the greatest decline in worker productivity. Overall, 90% of the participants reporting a low quality of life reported reduced productivity. On the other hand, only 22% of the participants reporting a high quality of life experienced reduced productivity.

"An important implication of this study relates to the importance of alleviating the symptoms of GERD to improve quality of life, reduce absenteeism, and enhance worker productivity," said Offman. "The overall costs to employers may be reduced by effectively managing patients with chronic heartburn." ■

Terrorism plans can be cost-effective

Preparing for hazmat poisoning is a first step

Could your hospital safely treat a single victim of a chemical poisoning without endangering emergency department staff? Could you handle 50 or more victims?

If hospitals can cope with hazardous material spills or poisonings, they are on track to develop readiness for chemical or biological terrorist events, preparedness experts say.

That capability must be available 24 hours a day, seven days a week, and must be backed up by updated policies and periodic training, says **Henry Siegelson**, MD, FACEP, an emergency physician based in Atlanta and an expert on hospital disaster preparedness.

"Unless there are policies and procedures in place for the management of a victim exposed to a chemical, then the health care worker can very rapidly become a victim," says Siegelson, who has provided consulting worldwide through Disaster Planning International, based in Indianapolis.

"It's much more than just training. It's more than equipment," he says. "It's also policies and procedures and exercises. I believe that every single hospital that has an emergency department must be able to, without exception, manage at least one or two victims of a hazardous material exposure on a 24-hour basis, any time day or night. You cannot depend on the fire department. You cannot depend on any other agency to help. This must be an internal capability. This is a community responsibility for the hospital."

Siegelson recommends these steps toward preparedness:

1. chemical preparedness, including proper decontamination and protective equipment and awareness and operations-level training;

2. incident command systems, which enable the hospital to organize resources to respond during disasters;

3. syndromic surveillance, which allows the hospital to recognize patterns of patient complaints that might suggest a biological attack;

4. reporting to the health department of data collected from syndromic surveillance;

5. exercises and drills in the community;

6. responding to an actual event.

Preparedness doesn't have to be a budget-buster, Siegelson says. For example, an outdoor decontamination unit costs far less than an internal one that requires new construction or remodeling. If the hospital is flooded with the "worried well" who have minimal, if any, exposure, the hospital can use simple decontamination kits that allow people to remove their clothing even in a public place. The kit, manufactured by Haz/Mat DQE in Indianapolis, leaves the patient draped in a poncho-like garment. ■