AMERICAN HEALTH CONSULTANTS®

# Occupational Health Management™

*A monthly advisory for occupational health programs*

## IN THIS ISSUE

**New approach recommended for sharps injury prevention**
The National Alliance for the Primary Prevention of Sharps Injuries (NAPPSI) has asked for new language from the National Institute for Occupational Safety and Health to reflect the dramatic changes that have taken place in needlestick and other sharps injury prevention efforts. NAPPSI is seeking recognition of a two-pronged approach involving primary and secondary prevention. Primary prevention involves techniques that eliminate needles entirely, while secondary prevention refers to those techniques and/or devices that improve the safety of procedures involving needles. Wherever possible, the organization recommends primary prevention, arguing that the 'safest' needle is no needle at all . . . . . cover

**Going smokeless? Don't forget education**
If your workplace — or that of your client — is not yet entirely smoke-free, it will be soon thanks to a recent U.S. Court of Appeals ruling giving the Occupational Safety and Health Administration until Dec. 13, 2002, to provide a timetable for the conclusion of a rule banning smoking at nearly all workplaces . . . . . 40

***Continued on next page***

**APRIL 2002**
**VOL. 12, NO. 4 (pages 37-48)**
**NOW AVAILABLE ON-LINE!**
**www.ahcpub.com/online.html**

**For more information, call: (800) 688-2421**

# National petition renews focus on sharps injury prevention techniques

*Lag time between support and implementation*

A recent petition by the Carlsbad, CA-based National Alliance for the Primary Prevention of Sharps Injuries (NAPPSI) asking for a new "Notification to Clinicians on Sharps Injury Prevention" has once again shone a bright light on the importance of preventing needlestick and other sharps injuries.

In addition, the petition, which was addressed to the National Institute for Occupational Safety and Health (NIOSH), brings attention to the recent progress that has been made in this all-important area.

But NAPPSI's rationale for the petition was more than a call to action, says **Brad Poulis**, MBA, the organization's executive director. It was a definitive statement of the group's overriding philosophy and mission.

"No. 1, NIOSH is probably the top target in terms of the organizations that are more capable of informing and communicating to health care workers on various safe practices," he notes. "No. 2 is timeliness. The wording NIOSH currently uses is over 10 years old and does not truly incorporate the concept of primary and secondary prevention."

At the time of early needlestick safety awareness that accompanied the rise of AIDS in the late 1970s and early 1980s, there was a major focus on bloodborne pathogens, Poulis notes. "People wore gloves, facemasks, and increased their needlestick injury awareness," he says. "Using engineering

*Continued from cover page*

**You are what you do; fitness, occupation linked**
A Finnish researcher demonstrated that young workers with physically demanding jobs are more physically fit than their counterparts who sit at their desks all day. For older workers, the story was not so upbeat; middle-aged workers at such jobs were actually less fit than their counterparts in less demanding jobs.While all employees are not created physically equal, many jobs have the same physical requirements for *all* employees . . . . . 41

**Supreme Court limits ADA in work injuries**
It may not be as easy as once thought for employees to qualify for protection under the Americans with Disabilities Act — even if their work-related injuries permanently limit their ability to perform certain job duties. In a recent decision, the U.S. Supreme Court set a high standard for the definition of disability in the anti-discrimination law. Being unable to lift or reach is not enough; the impairment must keep an employee from doing the most basic tasks of daily living . . . . 43

**Heavy lifting no risk factor in disc degeneration**
With all of the well-known links between heavy lifting and back ailments, you could logically assume that heavy lifting is linked to spinal disc degeneration. Surprisingly, you'd be wrong, according to a recent study. In fact, the risk of disc degeneration is not necessarily linked to back pain at all . . . . . 44

**Mind-body connection helps cure what ails**
Body-centered therapy, a practice grounded in a belief in the mind-body continuum, is but one of many alternative practices being sought by employees. Body-centered therapy can be effective in relieving and/or curing common complaints by combining gentle touch and traditional therapy . . . . . 45

**Reader survey**. . . . . insert

## COMING IN FUTURE ISSUES

- How to customize your fitness program to your employee population
- Are your drivers fit? A look at the new guidelines from the DOT
- Record-keeping regulations: How do you keep up — and how do you comply?
- What are the keys to a successful back health program?
- Workplace violence: How to deal with it, how to prevent it

controls was the thing: find something that can keep sharps from sticking you."

What NAPPSI would like to see, he says, is a greater emphasis on primary prevention, which involves the elimination of needles. "Obviously, NIOSH says you should use needleless systems wherever possible, but the key is to exhaust all primary prevention items and *then* use secondary prevention," he says. "We're also asking NIOSH to put these in the front of their guidelines. If you go to their site now and try to find this information, you have to dig pretty deep."

### *Primary vs. secondary prevention*

A number of health care professionals agree that primary prevention is preferable. "God, yes, needleless techniques are the best," says **Jean Randolph**, RN, COHN-S, employee health manager for Children's Healthcare of Atlanta, and a member of the national board of directors of the Atlanta-based American Association of Occupational Health Nurses (AAOHN). "I'm on 24-hour call for needlestick injuries. I'm praying for [needleless technology]."

But that support is not universal, says **Steve Bierman**, MD, CEO of San Diego-based Venetec International. Bierman is NAAPSI's founder and president. "I was an emergency doc for 18 years, so my roots are in the acute-care setting," he explains. "I know from that and from other experience that if you go to an occupational health nurse or a needlestick prevention nurse they will feel they have done their job by shielding, sheathing, or retracting the needles that are in the workplace."

Part of the reason for this, he says, is the focus of the needle manufacturing industry, which is spending "enormous marketing dollars" on their safety devices. "The lion's share of health care workers has quite naturally migrated to that kind of safety product, namely secondary prevention," Bierman says. "But while NAPPSI and Venetec applaud Becton Dickinson and Johnson & Johnson for making needles safer, the safest needle is the needle that never enters the workplace. Thus, primary prevention is always superior when it can be employed. Of course, when you absolutely have to have a needle enter into the patient's skin, secondary prevention is absolutely necessary."

The number of needleless options available is growing almost daily, says Poulis. "New technologies come out all the time," he says.

"Probably one of the most important functions we provide is education. I get calls almost weekly asking what is available. One of the problems is that some of the companies that offer them are fairly small and don't have much money in their marketing budgets. Not everyone is aware these products even exist."

## Some needleless options

Needleless options fall into several different categories, says Poulis. They include:

- **Needless injection systems:**

These devices mostly use forced air with micronized vaccine or medication delivery ."A big focus is on commonly injected systems like flu and other vaccines, as well as insulin," says Poulis. "Use of these systems would also contribute to eliminating a large amount of medical waste, which would help protect waste workers as well."

- **Hemodynamic monitoring:**

This includes noninvasive monitoring of blood and heart/cardio functions. "You would use a central venous catheter, already common in the [intensive care unit], with electrical impulses giving you the information you need," Poulis says. "There are devices out there now, using little adhesive pads on the chest that take the measurements without piercing your body."

- **Securement devices:**

These replace sutures for anchoring various catheters by using adhesive pads with anchors.

- **Needleless diagnostics:**

One such option is called the lassette, which uses a laser beam to put a small hole in the finger to check blood sugar. "This is currently on the market," says Poulis.

- **Needleless intravenous (IV) products:**

These would allow health care workers to access IV lines without a needle.

- **Surgical glues and adhesives:**

There is a new product by Ethicon called Dermabond that is a skin adhesive for mild, sharp cuts such as knife cuts. "This can be used instead of stitches," Poulis explains.

- **Nontraditional drug delivery:**

This includes nasal inhalants and patches. "The challenge here is to create formulations with drugs that can be delivered through nontraditional methods," Poulis notes.

The value of primary prevention can be seen, says Bierman, when one looks at extension sets. "If at one end you have a needle-free valve, like Baxter's Clearlink, then in order for access you don't need a needle, just a syringe," he notes. "If at the other end you have a catheter securement device instead of tape or suture, then because you will be reducing unscheduled restarts by 71%, the needle you would have had to use for a restart is no longer necessary.

"So, if you put these devices on both ends of an extension set, you eliminate the majority of needles used in IV therapy," he continues. "We believe this would eliminate 100 million needles a year from the hazard string. There's not a hospital in the U.S. with less than 50% unscheduled restarts, and health care workers use the most dangerous of all needles — the hollow-bore needles."

## The secondary prevention debate

Secondary prevention devices, where the sharp is in place but it is rendered safer, are available for many different applications, such as blood drawing devices, IV catheters, syringes, and scalpels. "There is a whole plethora of products that shield the needle in one form or another," notes Poulis.

The raging debate, he says, is which type of shield is preferable. "It comes down to active vs. passive," he explains. "Take a syringe. If after you do an injection you push a button and the needle then pops back into the tube, this is an 'active' technique, because you have to push the button. With a passive device, as you are pulling the needle out, a little sheath automatically comes over the needle and clicks into place. You can't stop it. That's considered passive."

Some health care professionals criticize the passive devices because they can sometimes affect clinical technique, says Poulis.

Bierman, however, sees it a bit differently. "Anything is better than nothing, and I applaud any institution that adopts either approach," he says. "But because nursing staffs change so frequently, it's very difficult to train and cross-train everyone. That being the case, I incline toward a passive technique because there's less of a teaching burden."

Randolph agrees. "I like the passive approach because you don't have to go through a lot of training," she says. "The only reason you would have to stick the patient again is if you don't have any idea how to use it. But the highest probability is that you will have emptied the syringe or gotten the IV catheter in before you

retract the needle. The only chance for an accident is if the technology is faulty."

### *Easier said than done?*

The main challenge in the move towards needleless techniques, Randolph maintains, is not a lack of support but a cumbersome regulatory process.

"My sense is we're all working on this. It's an absolutely wonderful idea to go to safe needles, or to no needles. But I don't think anybody has any idea what kind of job this entails," she says.

Randolph knows whereof she speaks; she sits on her institution's committee to examine potential new techniques and equipment in this area. "We are required by OSHA to bring these devices into the hospital, evaluate them, and have 50% of the users responding by filling out the evaluation."

So, for example, if the product is an IV catheter, the nurses are trained on it by representatives from the manufacturer. Then they use it, but they still have to complete the evaluation.

"We don't have enough nurses as it is," notes Randolph. "Now, we want to give them forms to fill out. We have to distribute the devices, train the nurses, and get the evaluations back. This is not a process that lends itself to any kind of speed."

Nevertheless, she says, some of the new devices have successfully made inroads. "In most hospitals, extension sets are darn near a given," she says.

She notes recent improvements in securement devices, which she considers "a real important piece" in the move to improve sharps safety. "Some people stay in the hospital for a day or two and then go home with lines," she observes. "Securement devices are really important then, because you don't have anesthesiologists or IV therapy nurses right there."

Randolph adds that "It's crazy to think health care systems do not want needleless solutions, because every stick is a potential HIV case. The cost of that is phenomenal, and besides, think of the impact on someone's life."

Bierman couldn't agree more. "I don't want to see another doctor or nurse get hepatitis B or HIV, and die from an unnecessary needlestick," he says.

Bierman notes that NAPPSI will print an advisory on its web site (www.nappsi.org), and will be asking *Journal of the American Medical Association* and major nursing journals to include it in future issues.

"Our people are overworked," he says. "The danger faced in other hazardous occupations is small potatoes compared to the danger every doctor and nurse face every day; someone turns around and pokes you and you're done."

*[For more information, contact:*

*• **Brad Poulis**, Executive Director, National Alliance for the Primary Prevention of Sharps Injuries, Carlsbad, CA. Telephone: (858) 350-8623.*

*• **Steve Bierman**, MD, CEO, Venetec International Inc., San Diego, CA. Telephone: (800) 833-3895. Web: www.Venetec.com.*

*• **Jean Randolph**, RN, COHN-S, Employee Health Manager, Children's Healthcare of Atlanta, 1001 Johnson Ferry Road, Atlanta, GA 30342. Telephone: (404) 250-5437. E-mail: jean.randolph@choa.org.]* ■

# Policy, education key to going smoke-free

*Clock ticking on OSHA workplace smoking ban*

A recent ruling by the U.S. Court of Appeals for the District of Columbia has given OSHA until Dec. 13, 2002, to provide a timetable for the conclusion of a ruling to ban smoking at nearly all workplaces. While it's still unclear just when the ban will go into effect, it's certainly time for workplaces that are not yet smoke-free to start planning for the transition.

Such a transition requires a two-pronged approach, says **Don R. Powell**, PhD, president of the Farmington Hills, MI-based Institute for Preventive Medicine. "It's important to implement a smoke-free policy, but at the same time you must offer employees a way to quit, or to at least control their smoking while at work," he notes.

### *And we* do *mean smoke-free*

It's likely that the new OSHA ruling will reflect earlier definitions of "smoke-free," which means that smoking will be banned in the workplace, but not on other company property. This is inadequate, Powell insists.

"We think a total ban is appropriate for a

number of reasons," he offers. "Part of the goal of a smoke-free policy is to encourage people to also smoke less. If they have no access to cigarettes at all during the day, particularly if they have a large campus, this will further encourage employees to quit smoking."

This approach may even apply to hospitals, commonly thought of as 'smoke-free.' "Very few of them have a total ban on the entire campus," says Powell.

Another drawback of 'building-only' bans, he notes, is that worksites where smoking is allowed outside the buildings can lead to 'power smoking.' "When employees go on smoking breaks, they will take increased hits and deeper inhales to get the nicotine into their body more readily," he explains. "The danger here is that when you take in nicotine in this much more rapid fashion, one cigarette would actually double or triple the tar and nicotine absorbed. In other words, the employee may think he is cutting down but in reality he isn't."

Powell says about 10% of a given employee population will quit smoking when a smoke-free policy is in place; typically, 25 out of every 100 employees smoke cigarettes.

"About 70% of all workplaces in the United States now have total bans on smoking *inside*," says Powell, which is a significant increase from the 46% that had such policies in 1993. There are no figures on how many also ban smoking outside the buildings. "It's been estimated this new rule will save 8,000 lives a year out of the 50,000 who die annually as a result of environmental cigarette smoke," Powell observes.

### Implementing the policy

Before implementing your policy, Powell advises, examine the one you currently have in place. "For example, you may in fact have a policy in place, but not a total ban, so it may be time to move to a total ban," he says.

Form a task force or an advisory committee to determine the implementation process, and by all means prepare your workers for the new smoking cessation policy. "The key is to communicate, communicate, communicate," Powell advises.

"This needs to be implemented with the same degree of attention accorded any other company policy," he continues. "Give advance warning, announce quit-smoking services and promote them, and perhaps offer remuneration for participation or pay for those services."

Financial incentives such as lower rates for health insurance for nonsmokers or financial rewards independent of reduced premiums may be considered, Powell suggests.

### Cessation program a must

If you are going to implement a smoking ban, then an employee smoking cessation program is imperative, says Powell. "You absolutely need a quit-smoking program or the policy becomes punitive," he explains.

The type of programming that works best is one with multiple components, Powell says. "The best programs address both physiological addiction and behavioral issues," he explains. "So patches, gum, and even Zyban can be effective as pharmacological adjuncts to behavior modification. But they aren't meant to be used alone. Employees must learn new skills as well, such as the ability to relax without a cigarette."

A new concept that has arisen in smoking cessation programs is the 'controlled smoker.' "This concept came out of companies that instituted nonsmoking policies," notes Powell. "There are some employees who just won't stop smoking, but they still need to get through the day without lighting up. We have techniques in our 'smokeless' program that help to prevent and eliminate cigarette urges. Now, when we promote our program, we tell employees that it's designed for those 'who want to *quit or control* their smoking.'"

*[For more information, contact:*

• ***Don R. Powell**, PhD, President, American Institute for Preventive Medicine, 30445 Northwestern Highway, Suite 350, Farmington Hills, MI 48334. Telephone: (248) 539-1800. Fax: (248) 539-1808. Web: www.healthylife.com.]* ■

# Physically demanding jobs help boost worker fitness

*Findings apply mainly to younger workers*

A study concluding that physically demanding jobs boost the physical fitness of workers might not open many eyes, but a glance below the surface of a recent article may provide

some valuable insights for occupational health professionals.

The study, published in the January 2002 issue of *Medicine & Science in Sports & Medicine*, the monthly journal of the Indianapolis-based American College of Sports Medicine, looked at nearly 8,500 individuals in Finland. It showed that young men who were engaged in heavy physical work had higher levels of cardiorespiratory fitness, hand-grip strength and trunk muscle endurance than young men who did lighter work.

The study found similar results in cardiorespiratory fitness for women. Frequent leisure-time activity was also associated with better results in the step and trunk extension tests, but not in the handgrip test.[1]

## Older workers pay a price

Interestingly, the study also found that physically demanding jobs are not nearly so beneficial for older workers. In fact, middle-aged workers in physically demanding jobs were actually found to have *lower* fitness than workers who engaged in less strenuous work.

"Certainly, training benefits can be derived from physically demanding occupations," notes **Bradley C. Nindl**, PhD, FACSM, CPT, MS, research physiologist in the military performance division of USARIEM in Natick, MA. "But the article also finds that with older workers, increased physical occupational demands may be detrimental to fitness. This finding raises important questions regarding short-term vs. long-term effects of physically demanding jobs."

One reason for this variance, Nindl offers, may be the fact that the occupational physical demands of any given job are usually absolute and not based on age or gender. "To use a military example, a soldier deployed to the field must carry a mandated list of items and equipment in a rucksack and thus all soldiers will carry the same load, no matter what their physical capacities are," Nindl offers. "Similar analogies would apply for industry. With the aging process comes diminished physical capacities, yet the occupational requirements remain the same."

## Possible explanations

This scenario, he points out, is likely to lead to overuse syndromes and injuries due to a mismatch between personnel capacity and job demands. "Also, perhaps the fatigue from the daily grind leaves one less likely to seek out leisure time physical activity," he suggests. "These could be partial explanations for the finding of the age difference in the relationship between fitness and daily work."

Some of these differentials may be overcome with special training. For instance, in an article published last year in *Medicine & Science in Sports & Medicine,* Nindl and colleagues found that gender differences in physical performance measures were reduced after resistance training in women, which underscores the importance of such training for physically demanding occupations.

## Job analysis a 'must'

Similarly, a job analysis is essential when screening applicants, says Nindl. "You must consider what the requisite energy systems, muscle groups, and movements for the job are," he advises. "The goals or desired outcome variables can then be identified.

"An office worker would benefit from a generalized fitness program, with perhaps no need for task specific training, other than taking proper workplace preventive measures for CTDs [cumulative trauma disorders]," he suggests. "Physically demanding jobs can benefit from structured fitness programs designed to improve the fitness components most important for job success."

*[For more information, contact:*

• ***Bradley C. Nindl**, PhD, FACSM, CPT, MS, Research Physiologist, Military Performance Division, USARIEM, Natick, MA 01760. Telephone: (508) 233-5382. Fax: (508) 233-4195. E-mail: Bradley.Nindl@NA.AMEDD.ARMY.MIL.]*

## References

1. Tammelin T, Nayha S, Rintamaki H et al. Occupational physical activity is related to physical fitness in young workers. *Med Sci Sports Exerc 2002;* 34:1; 158-166.

2. Kraemer WJ, Mazzeti SA, Nindl B et al. Effect of resistance training on women's strength/power and occupational performances. *Med Sci Sports Exerc 2001;* 33:6, 1,011-1,025. ■

# Supreme Court limits ADA in work injuries

*'Disability' must affect daily life tasks*

Employees whose work-related injuries permanently limit their ability to perform certain job duties will find it hard to qualify for protection under the Americans with Disabilities Act (ADA).

In January, the U.S. Supreme Court set a high standard for the definition of disability in the anti-discrimination law. [1] Being unable to lift or reach is not enough; the impairment must keep an employee from doing the most basic tasks of daily living, such as brushing teeth, bathing, or doing household chores.

"This case is very far-reaching," says **Katherine Benesch**, a partner with Duane Morris, a Princeton, NJ-based law firm that represents hospitals and other health care providers around the country. "It greatly limits the number of people who are going to have a viable claim under the ADA. They have so expanded the kinds of things you have to not be able to do to be disabled."

The case follows two others in U.S. Appeals Courts that also limited claims of disabilities. A nurse at Mercy Medical Center in Cedar Rapids, IA, suffered a back injury at work and underwent a diskectomy. When her pain continued, treating physicians told her she could no longer lift more than 40 pounds — although at the time, the hospital required nurses to be able to lift up to 75 pounds.

When she wasn't able to reach an agreement with the hospital on a job that would accommodate her lifting restriction, she found work elsewhere and sued under the ADA. Last fall, the Eighth Circuit Court of Appeals ruled that she didn't have a disability as defined by the ADA, which meant her employer wasn't legally required to provide an accommodation.[2]

In another case, the 11th Circuit Court of Appeals ruled against an HIV-positive dental hygienist who sued after he turned down a transfer to a clerical post that would have paid him much less. [3] His employer didn't want him working in the "exposure-prone" procedures of dental cleaning because of the potential risk to patients.

"The criteria for being able to work under the Americans with Disabilities Act is that you're a qualified individual for the job," explains Benesch. "In the Waddell case, they said because he's HIV-positive, he's not a qualified individual for the job because he's a direct threat to the dental patient."

In yet another ADA case, a federal jury in Philadelphia said that a nurse with latex allergy did not qualify as disabled under the anti-discrimination law. The jury sided with Temple University Hospital's attorneys who asserted that the nurse could continue to work as long as she was in a latex-free environment.

## MSDs lead to job restrictions

For hospitals, which have among the highest rates of work-related musculoskeletal disorder injuries (MSDs), how to accommodate temporary or long-term physical restrictions is a common quandary. The U.S. Supreme Court considered the case of a Toyota Motors assembly line worker who suffered from carpal tunnel syndrome. She sued when her supervisors refused her request to move to lighter duty, such as inspecting cars.

MSDs — primarily back injuries — could lead to similar scenarios in health care. In 1999, nursing aides, orderlies and attendants suffered more work-related MSDs than any other occupation, with more than 44,000 injuries. Registered nurses ranked sixth, with more than 13,000 injuries, according to the Bureau of Labor Statistics.

"These are actually very common types of questions that come up in the workplace," says **Charlene M. Gliniecki**, RN, MS, COHN-S, vice president of human resources for El Camino Hospital in Mountainview, CA. "This is one of those cases that represents a huge volume of similar cases."

As Gliniecki learned about the Supreme Court case, she imagined a breakdown in the relationship between the employee and her supervisors that ultimately led to the lawsuit. Workers' compensation is designed to handle temporary or long-term disability claims — although Gliniecki acknowledged that it may not provide workers with dollar amounts that they believe they are due.

"Workers' comp doesn't pay for pain and suffering, [and] it doesn't compensate for losing your recreational capacity," she says. "[The Supreme Court case] was a workers' comp issue that became an ADA issue [probably] because something didn't happen in the workers' comp piece."

Although the Supreme Court said that employers are not required to make accommodations, helping an injured worker retrain for another position is often the best policy, says Gliniecki.

"By and large, doing the right thing, which has been our philosophy and our practice, would not change [the ruling]," she says. "Our practice is not going to be significantly altered by this. We make a great effort if we have someone who has skills and abilities who, with some training or short-term orientation, can move into another job."

The tight labor market in health care makes accommodation even more appealing for employers. Hospital administrators are also are more aware of the physical dynamics involved with MSD injuries, says **Ron Kimzey**, a partner with Ford & Harrison, an Atlanta-based firm that practices labor and employment law.

"Probably the managers in hospitals tend to go the extra mile more than they do in some other industries," he says. "They understand the nature of the condition. They spend a little bit more time trying to make sure if there is an accommodation that can be made, that's what they'll do."

### Documentation of function is key

When an employee is injured, no one knows whether that case will one day become involved in a dispute. That's why thorough documentation is critical from the start, agree Gliniecki and Benesch.

"We often are asked to assist or support or participate in assessing whether an individual is able to perform the essential functions of their job," Gliniecki says of employee health professionals.

From a legal standpoint, offering injured employees another job or a reasonable accommodation to continue working may not be required — but it's still a good policy, says Benesch.

"As long as they're continuing to work, they would have less chance of having a case that had merit," she says.

If the employee claims a disability due to an infectious disease, the employer would need to consider the risk to other employees or patients as paramount over the employee's desire to work, she says. "That becomes a very important factor and your need to make a reasonable accommodation becomes different," she says.

"The bottom line, especially after this Supreme Court case, is that you really have to look at the facts and circumstances of each particular employee," says Benesch. "Judge each on its own facts. There's not really a formula."

### References


1. *Toyota Motor Mfg. v. Williams*, No. 00-1089, U.S. Supreme Court (Jan. 8, 2002).
2. *Brunko v. Mercy*, No. 00-2989, 8th U.S. Circuit (Aug. 15, 2001).
3. *Waddell v. Valley Forge*, No. 00-14896, 11th U.S. Circuit (Dec. 21, 2001). ■


# Risk of disc degeneration not linked to heavy lifting

*Study shows it is also not related to back pain*

Despite legitimate concerns about the impact of heavy lifting on back health, occupational health professionals can rest a bit easier about one aspect of perceived occupational risk factors. A recent study indicated that heavy lifting, traditionally associated with back pain, is not necessarily linked to spinal disc degeneration. Furthermore, the study noted, the risk of disc degeneration is not necessarily linked to back pain at all.[1]

A Swiss research team used magnetic resonance imaging (MRI) scans to look for evidence of lumbar disc degeneration in 41 adults who were initially free of back pain. Follow-up scans showed that disc degeneration had developed or progressed in 41% of the subjects.

A wide range of possible risk factors for disc degeneration were evaluated, focusing on work- and sports-related factors. After adjustment for other factors, there were just three significant risk factors found: the presence of disc herniation, lack of sports activities, and night-shift work. Heavy lifting, carrying, twisting, and bending were not found to be significantly related to disc degeneration.

### Results not surprising

The findings of this study came as no great surprise to **Scott D. Boden**, MD, professor of orthopedics and director of The Emory Spine Center at Emory University School of Medicine in Atlanta. "It has been very difficult to make

direct associations between disc degeneration and many environmental/occupational exposures that one might assume would be risk factors," he asserts. "This difficulty likely stems from the fact that disc degeneration is common as the population ages, and it can be increased to varying degrees depending on the interplay between many different factors that are difficult to control in studies, such as genetic predisposition, environmental exposures, diet, physical loads, smoking, and injuries." Even studies in identical twins have had difficulty finding major risk factors for disc degeneration, he adds.

The notion that disc degeneration may not correlate with low back pain also is not new, says Boden. "In 1990, my group published a paper in the *Journal of Bone and Joint Surgery* reporting on MRI scans in asymptomatic (no low back pain history) volunteers. By age 60, 92% had at least one level of disc degeneration (dehydration) on MRI scans even though they had no back pain," he reports.

### The mystery of shift work

The authors of the study had a harder time explaining why there *was* a correlation between shift work and risk degeneration. "The cause for this negative effect remains speculative," they wrote. "An alteration of the diurnal fluid shift in the disc required for normal disc nutrition might be a contributing factor. A disturbance of normal sleep is among the most commonly reported problems among shift workers. In addition, sleep quality, physical fitness (maximum oxygen consumption and muscle strength) and musculoskeletal problems are shown to be associated in shift workers. On the other hand, the negative influence of night shifts might be caused by adverse working conditions associated with night shifts." [1]

*[For additional information, contact:*

• ***Scott D. Boden**, MD, Professor of Orthopaedics, Director, The Emory Spine Center, Emory University School of Medicine, Atlanta, GA. E-mail: Scott_Boden@emoryhealthcare.org.]*

### References

1. Elfering A, Semmer N, Birkhofer et al. Risk factors for lumbar disc degeneration: A 5-year prospective MRI study in asymptomatic individuals. *Spine* 2002; 27:125-134. ■

# Mind-body approach tackles worker ills

*Body-centered therapy about gentle touching, talking*

As the general public turns with increasing frequency to alternative medicine, occupational health professionals will no doubt see employees reflecting this trend. In some cases, alternative therapies may prove particularly efficacious when it comes to common work force maladies.

Take, for example, body-centered therapy, a practice grounded in a belief in the mind-body continuum. Its practitioners claim their work can be effective in relieving and/or curing such complaints as:

- anxiety and depression;
- carpal tunnel syndrome;
- digestive disorders;
- headaches;
- lower back pain;
- neck pain;
- uncontrolled stress.

"Body-centered therapy grew from two different directions," explains **Adam T. Pancake**, EdS, LPC, NCTMB, a practitioner in Atlanta. "It grew from a psychotherapy background, or more specifically, from Wilhelm Reich, the first Westerner to get into making direct contact with the body as part of alleviating pain and symptoms, whether physical or emotional." The other source, notes Pancake, is the whole stream of bodywork, from massage therapy to Rolfing.

At the core is the concept of a mind-body continuum. "I do not see the mind and body as separate, compartmentalized units, but rather like two sides of the same coin," Pancake explains. For example, he notes, he can work on some of the emotional pieces of a patient's problem without the patient being conscious he is doing it. "In fact, you can work on emotional problems through the body, as well as through talking," he says.

Pain, Pancake continues, is the body's way of getting your attention. "Part of your pain is like the waving arms one might see above the surface when a ship is sinking," he says. "But the *real* trouble lies under the water."

### How it works

When a patient arrives for treatment, his or her personal goals will be discussed as part of the

healing process. "The paperwork includes a health history form," Pancake says. "We sit and talk, get an idea of what brought the patient to me. If they have a specific pain they want to work to get rid of, I want to keep that in mind. But I will look at their whole body. In other words, they may have neck pain, but I may still look at their feet or their hips."

A gentle, hands-on assessment, with the patient fully clothed, is conducted, and questions are encouraged. The assessment includes a full-body evaluation.

The therapeutic touching, described as "non-invasive," is very gentle. It is *not* what the general public would call manipulation," Pancake stresses. The emotional therapy can be quite similar to that provided by a psychotherapist, "but it depends on what I am looking for and how the patient presents," he adds.

### A worker in pain

Pancake has helped many workers deal with pain and return to a higher level of health and productivity. "I have had clients come in with varying levels of back pain, much of it in the lower back, and sometimes accompanied by an ongoing series of headaches," he relates.

"One particular patient had been on a lot of medication over a long period of time, but they were not getting better. It was affecting their work and their happiness. They were worn out, and did not even feel inclined to do the things they enjoyed. It limited their ability to exercise, which was one of their goals."

Pancake began with a full-body assessment, and did some very gentle work with the spine as well as with the soft tissue around it. "I even did some gentle cranial work," he recalls.

Within a period of six months, the patient was able to decrease the amount of medicine, and the headaches had become much less frequent. "It would have been much faster, but I only saw the patient for one hour every two weeks or so," notes Pancake. "After a couple of years, the client reported only rare headaches, and virtually no back pain; he was not taking any major medications."

Treating the body alone in this case would not have been nearly as effective, adds Pancake. "There were some emotional components to this treatment, some of which were spiritually related," he says. "The patient's relationship with God was changing and this had an impact on his health. He had become estranged from God for a time, but was finding that he wanted to get back into a relationship with God but more on his own terms. We talked through this in a manner similar to traditional counseling, but we worked through the body as well."

### Practitioners still rare

Although body-centered therapy began to come into prominence in the 1970s, there are only a handful of practitioners in the U.S. today, says Pancake. "The bulk of them are in Colorado or California. I'd be surprised if there were 100 in the whole Southeast," he says.

Even more rare are practitioners such as himself who are equally schooled in both therapy and body work. "Few people have studied both sides," he notes. "Most are body-centered psychotherapists."

While there is no central organization interested occupational health professionals can contact, Pancake knows of colleagues in many other states and often provides referrals. In addition, local psychotherapists may be of assistance.

*[For more information, contact:*

*• **Adam T. Pancake**, EdS, LPC, NCTMB, 2300 Henderson Mill Road, Suite 411, Atlanta, GA 30345. Telephone: (770) 414-5957.]* ■

NEWS BRIEFS

## E-Health management case study available

Mayo Clinic Health Management Resources (MCHMR), of Rochester, MN, is making available a new case study that details the experiences and approaches of Hoffmann-La Roche Inc., in implementing a multifaceted health management program for its employees and their families, free of charge. At the core of the program is an online health information resource.

Mayo says a review of the program will prove

helpful to organizations interested in developing successful e-health management programs for their employees. Roche's commitment to employee health is based on the belief that helping employees improve their health is in the best interests of the company; it results in a work force that is more productive, has fewer distractions and will be absent less frequently.

The case study explains an in-house program called "Choosing Health," which includes a number of employee health components such as a fitness center, a nurse line, a disease management program and an e-health web site. It also discusses the program's key strategies and principles.

The final portion of the report explains incentive programs and results, as the company built the use of two tools offered in the Choosing Health program, the web site and the nurse line. For example, the nurse line experienced a 120% increase in calls over six months on the topic of back care, one of the priority conditions the company chose to address. In addition, the study found a 284% increase in on line site visits as a result of an incentive program to regularly use the health information web site provided by MCHMR.

Organizations interested in obtaining a complimentary copy of the case study can visit the Mayo web site: (www.MayoClinicHMR.org). ▼

# Web site set up for uninsured

In the wake of the recent loss of thousands of jobs across the nation, Georgetown University has created a web site to help workers understand their legal protections regarding health insurance coverage following job loss. The site, which was made possible through a grant from the Princeton, NJ-based Robert Wood Johnson Foundation, was developed by the Georgetown University Institute on Health Care Research and offers state-specific information on insurance regulations.

Called "A Consumer Guide for Getting and Keeping Health Insurance," the content includes separate guides for each of the 50 states and the District of Columbia, which will be updated periodically as changes in federal and state policy warrant.

The site also includes a glossary of insurance terms and complete information about consumer protections and eligibility.

According to the U.S. Census Bureau, 38.7 million Americans are currently without health insurance. Visit the site at: www.healthinsurance info.net. ▼

# Nursing home, OSHA settle

Beverly Enterprises, one of the nation's largest nursing home operators, will adopt specific measures to reduce back injuries for employees

**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.

## Subscriber Information

**Customer Service: (800) 688-2421 or fax (800) 284-3291, (customerservice@ahcpub.com). Hours: 8:30-6 M-Th; 8:30-4:30 F.**

**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.)



Editor: **Steve Lewis.**
Vice President/Group Publisher: **Brenda Mooney**, (404) 262-5403, (brenda.mooney@ahcpub.com).
Editorial Group Head: **Lee Landenberger**, (404) 262-5483, (lee.landenberger@ahcpub.com).
Managing Editor: **Alison Allen**, (404) 262-5431, (alison.allen@ahcpub.com).
Production Editor: **Emily Palmer**.



THOMSON
AMERICAN HEALTH CONSULTANTS

## Editorial Questions

For questions or comments, call **Alison Allen** at (404) 262-5431.

involved in lifting nursing home residents, according to OSHA. As part of a settlement agreement, the Fort Smith, AK-based company also said it will establish a training program and purchase mechanical lift equipment. The settlement applies to all Beverly Enterprises facilities within federal OSHA jurisdiction.

The agreement settles citations issued by OSHA to five Pennsylvania nursing homes. The agency found that the company's injury and illness records revealed numerous musculoskeletal injuries sustained by nursing assistants that resulted in extensive lost work time and restricted work duty. ▼



# OSHA launches e-news memo

The Washington, DC-based Occupational Safety and Health Administration (OSHA) has launched the premier issue of its new electronic communication tool, which will be e-mailed to subscribers on a regular basis.

Called *QuickTakes,* it contains a snapshot of OSHA's activities that support safety and health in the workplace, including news and announcements, background information, and other information of interest. Within the summaries, OSHA will often include links to the agency's web site, as well as other sites related to safety and health that provide specific additional information.

"*QuickTakes* will deliver short and concise information on the agency's activities," notes OSHA administrator **John Henshaw**. The e-mail, which will come directly to the subscriber's electronic mailbox, will cover just the highlights of important OSHA issues. Readers can then get additional information on a subject they would like.

If you are interested in subscribing, just visit OSHA's homepage (www.osha.gov), click on the QuickTakes icon and follow the subscription instructions. If you would prefer not to receive the electronic memo automatically, you can simply view it on OSHA's web site. ■