

Welcoming Our New 2006 NSMS Members

On behalf NSMS President Roosevelt, the NSMS Executive Committee and the NSMS Board of Directors, we like to thank all members who have renewed their 2006 membership to the National Safety Management Society. We would also like to acknowledge and welcome the following new members to our Society:

- Cheryl O'Brien, Cambrex Bio Science – (Walkersville, MD)
- Christopher Fought, General Motors (Pontiac, MI)
- Adam Hayes, US Army (Ft. Campbell, KY)
- Jon Mathrole – MOR PPM (Society Hill, SC)
- Patrick Schuerman – Overland Solutions (Newark, IL)
- Daniel Stalcup – Exxon Mobil – (Houston, TX)

We appreciate your interest in furthering your skills, knowledge and abilities in the management of safety and risks, as well as your interest to networking and professional development. Welcome again to NSMS!

Calling All NSMS Members: Volunteers Are Needed for Our National Conference Planning Committee

NSMS is still seeking volunteers to form a working committee for planning our National Conference. We need the efforts and support of all members to keep the information exchange and networking possible. Without a working group, our goal of a conference may not be met this calendar year. If you are interested in participating, please email us at nsmsinc@yahoo.com or call and leave a message at (800) 321-2910. Please spread the word and get involved! Thank you.

The NSMS “Blog” is Here

Steve Geigle has created and launched the “NSMS Blog” on the NSMS website. It will allow members and others to post comments, remarks and initiate discussions about a variety of safety management topics and issues. You can participate in the Blog by going to the NSMS website (<http://nsms.us>) and look for the link on the home page along the left-hand column of navigation areas.

FREE ACCESS: Online Certified Safety and Health Manager (CSHM) Educational and Exam Preparation Reference Materials

As a benefit for our current and future dues-paying members, NSMS is **permanently** offering free access to the Certified Safety and Health Manager (CSHM) preparation and educational materials. The online resources, created by NSMS member Steve Geigle, can be found at www.cshmprep.com and the only action an NSMS member needs to take is to email Steve requesting access from that website. You will need to include your current NSMS member number (found on your membership card and certificate). Once the number is verified, you will be granted a username and password to access the online reference materials. This is a great opportunity to brush up on your safety management and technical knowledge and prepare for a successful passing of the CSHM certification examination.

OSHA Creates Webpage for the Concrete Products Industry, Including Construction Work with Concrete

Safety issues exist in all phases of concrete production. On June 29, OSHA unveiled a Web page to help improve safety and health for the manufacture of concrete and concrete products and for construction work with concrete.

Concrete and Concrete Products - Manufacturing and Construction, the agency's newest Safety and Health Topics page, is a product of OSHA's alliance program and strategic partnership with the National Ready-Mix Concrete Association.

"This new resource provides useful information and guidance that will help foster a safer work environment for employees involved in cement production and manufacturing, and cement-related construction," said OSHA Administrator Ed Foulke. "The development of this page also demonstrates how we leverage our resources and work in cooperation with organizations to improve workplace safety and health."

Visitors to the site can access information to develop and implement comprehensive safety and health programs, including several examples from the construction and manufacturing portions of the industry. Also available are links to other resources that identify the most common industry hazards and possible solutions to those hazards.

The page highlights OSHA standards, compliance directives and standards interpretations that are related to manufacturing and construction in the concrete and concrete products industry. It also includes electronic assistance tools and expert advisors, Spanish language materials, training information, success stories and additional resources from OSHA and other organizations.

Employers and employees can access information that can be used to develop and implement safety and health programs and link to sites that identify hazards and possible solutions to those hazards.

The concrete Safety and Health Topics page can be accessed at:

<http://www.osha.gov/dcsp/products/topics/concreteproducts/index.html>.

OSHA Issues Safety Bulletin on Working with Automotive Brakes, Clutches Containing Asbestos

Many brakes and clutches used in new and recent model automobiles do not contain asbestos. However, asbestos remains a substantial source of potential exposure. Some reports have indicated that many mechanics and employees in the automotive repair shops as well as do-it-yourselfers are unaware that asbestos may be present in both old and replacement brakes and clutches.

OSHA has issued a Safety and Health Information Bulletin to inform employees and employers in the automotive brake repair industry of the precautions that must be taken when working with automotive brakes and clutches containing asbestos. In the case of do-it-yourselfers, OSHA does not have jurisdiction, and OSHA does not require these practices to be followed. To reduce the potential exposure to asbestos, EPA strongly recommends that all automotive brake and clutch repair work be done by professional auto mechanics.

According to the bulletin, the two preferred OSHA methods to control asbestos dust during brake and clutch repair and service are: a negative pressure enclosure/HEPA (high-efficiency particulate air) vacuum system; and the low pressure/wet cleaning method. The employer may use other methods (in conjunction with written procedures), to reduce exposure to levels equivalent to the negative pressure enclosure/HEPA vacuum system. For facilities that inspect, disassemble, reassemble and/or repair five or fewer brake or clutch jobs per week, the wet method can be used. The spray can/solvent system method can be used as an alternative preferred method since it meets the equivalency criterion of the negative pressure enclosure/HEPA vacuum system method.

Mechanics should assume that all brakes have asbestos-type shoes, according to the bulletin. Worn non-asbestos-type brake shoes cannot be readily distinguished from asbestos-type shoes. If a mechanic assumes incorrectly that a shoe is a non-asbestos-type and fails to use brake dust control procedures, increased asbestos exposure may result.

Mechanics must be trained in the correct and most effective way to use the control system selected by the facility manager or owner, the bulletin states. The danger of increased exposure to asbestos as the result of improper work practices should be explained. Examples of improper work practice include: directing an air nozzle at an enclosure seal, placing the nozzle of a spray mist too close to the work surface, not

placing the vacuum nozzle close enough to the contaminated surface, turning on the vacuum pumps before positioning the vacuum enclosure over the wheel and leaving them on when removing the enclosure, and splashing or spilling contaminated solutions on the floor. A control system must always be used and consistent work procedures are essential.

The bulletin can be accessed at <http://www.osha.gov/dts/shib/shib072606.html>. For more information about EPA's asbestos program, do-it-yourselfers may visit EPA's Web site (<http://www.epa.gov/asbestos>) or call the asbestos ombudsman's hotline/clearing house at (800) 368-5888.

MSHA To Stand By LLC Liability Decision

The Mine Safety and Health Administration issued an Interpretive Bulletin confirming that agents of limited liability companies (LLCs) may be held personally liable under Section 110(c) of the Mine Act if they knowingly authorize, order or carry out a violation of any mandatory health or safety standard under the act -- or fail or refuse to comply with any order issued under the act.

The agency had issued the document May 9, 2006, prompting three commenters to state that it conflicted with decisions of the Federal Mine Safety and Health Review Commission and an unpublished decision by the U.S. Court of Appeals for the D.C. Circuit. The agency concluded that case did not apply.

One comment stated that Congress did not expand Section 110 when it last amended it in 1990, so the new interpretation is inconsistent with the law. "The Secretary believes that the action Congress took with respect to Section 110 in 1990 has no bearing on the question of whether Section 110(c) is applicable to agents of LLCs. Congressional reenactment of a statutory provision without change may sometimes indicate approval of an existing interpretation of that provision," MSHA stated in the July 10 bulletin.

MSHA has said about 10 percent of the nation's 7,287 active mine operators now identify themselves as LLCs, and their actual number may be higher. The Interpretive Bulletin can be accessed at:

<http://www.msha.gov/REGS/FEDREG/NOTICES/2006MISC/E6-10666.asp>.

Insurance Analysis: Five Most Costly Medical Conditions Account for 60% of Lost Workdays Due to Short-Term Disabilities

Five ailments -- heart conditions, trauma, cancer, mental disorders and pulmonary conditions -- account for an average of 60 percent of all lost workdays due to a short-term

disability (SD), according to a MetLife analysis of more than 1.5 million SD income insurance claims. Employers can successfully use the relationship between medical expenditures and disability absences to develop a workplace strategy for mitigating rising health care costs, managing absences, and easing employees' concerns as they face increased responsibility for their health care decisions, MetLife stated.

"Lost workdays for employers can cause decreased productivity with a negative impact to the bottom line. Lost workdays for employees can mean a negative impact to their personal finances -- especially alarming at a time when they are also facing a spike in out-of-pocket medical expenditures due to an illness," said Ronald Leopold, MD, MetLife vice president, Employer Sponsored Benefits.

By understanding the link between medical expenses and disability absences, employers can leverage the right resources at the right time to help keep employees healthy and at work. For example, employers can work to ensure that SD claimants have access to health and medical information resources to prevent more serious (and costly) conditions further down the road. Educated employees, on the other hand, are better able to make informed decisions regarding their workplace benefits options and personal risk exposures.

"The trend toward consumer driven health plans creates a critical (risk management) shift from employer to employee. As employees assume more financial responsibility for their health care decisions, other workplace benefits take on an even more critical role for closing financial protection gaps," Leopold said.

Transitioning to consumer driven health plans can be made easier for individuals -- especially those who have a serious injury or illness -- if employers provide needed assistance in the form of educational resources, disease management and wellness programs, and financial protection benefits, MetLife officials said.

Leopold suggests that employers consider:

- Offering workplace programs that encourage a good diet, exercise and a generally healthy lifestyle.
- Promoting educational resources for employees so that they better understand how their good health choices may help mitigate future out-of-pocket medical expenses.
- Using aggregate medical and disability income insurance claims experience to determine which health and wellness programs will be most beneficial -- with the greatest return on investment -- for their employee population.
- Using life-stage benefits communications and offerings to maximize employees' satisfaction with their workplace benefits offerings. For example, because employees experience trigger events at different stages of their life, they require the educational resources, tools and workplace benefits that can be customized to meet their needs.

The MetLife analysis of disability causes and lost workdays examined the number of group SD claims filed with the insurer from 2001 to 2005. The average number of lost workdays was then calculated for the five most expensive medical conditions.

For more information, contact MetLife at <http://www.metlife.com>.

15 Secrets of Successful Recognition (by Steven Geigle, Public Education Section, Oregon OSHA)

1. Recognize as **soon** as you can after the behavior occurs. You've heard the old adage, "the sooner the better." That idea also applies to effective recognition. The longer you wait after the performance to reward, the less likely the recognition will be effective.
2. Be **spontaneous!** You don't need to plan how to recognize someone necessarily. Unplanned recognition is more likely heart-driven than policy-driven.
3. Be **sincere** when recognizing. The more heart-driven the recognition, the more likely it will affect the heart. Isn't that what recognition is all about? Genuine heart-felt recognition is usually much more effective than policy-driven recognition.
4. Be **spirited** when you recognize. Don't be afraid to show how happy you are about the performance of your employee.
5. Be **subtle** when recognizing. You don't need to make it a public display. Recognition in private has been shown to be generally more effective than public recognition. Believe it or not, most people do not like to be paraded in front of peer to be recognized.
6. You're motivated to recognize for **selfless** reasons. The purpose of the recognition is to highlight the great performance of your employee. It's not to show anyone how wonderful you are. Recognition that's motivated by selfish reasons will be perceived as disingenuous. It's all about the employee, not you.
7. Employees are **sure** they will be recognized. If you promise them something, follow through with the promise. The number one reason employees do not trust management is that supervisors and managers do not do what they said they were going to do.
8. Keep it **simple**. A simple "attaboy" or "attagirl" may be all that is required to be effective. The best recognition may not require tangible rewards like money. Keep it simple - make it fun!

9. Be ***specific***. Pinpoint each individual's specific achievement. Be careful recognition is based on fact, not just feeling. Emphasize the positive impact that individual's performance has added value. It's important that people know precisely how the employee has impacted the success of the organization.
10. It's more effective to ***single*** out individuals and recognize their personal achievement. If you recognize a group try to mention each individual's contribution.
11. Develop ***standards*** for recognition. Recognize for achieving specific behavioral and performance criteria rather than being first, best, most improved. Don't establish recognition schemes that reward for being lucky.
12. Recognition should be ***special***. The significance of any recognition is determined by the person who receives the recognition, not the person giving the recognition. You know the recognition has been significant in the heart and mind of the receiver when it increases the frequency of desired behavior.
13. Let employees choose from a ***selection*** of tangible rewards. Don't make the mistake of thinking one item works for everyone. It won't.
14. Keep your recognition program ***stable***. Don't change the rules of the game too often. People need to know that the reward and recognition they're working towards won't disappear before they're awarded.
15. Be ***sensitive*** to the wishes of the person you're recognizing. You don't want to recognize a person in a way that they may not want or appreciate. One lady promptly quit her job as a safety committee chairperson after being recognized for her great work over the previous year. When asked why she quit the position, she said, "I never want to be recognized in front of people like that again!"

Study: Protective Clothing Could Still Leave Health Care Workers Vulnerable To Infection

Health-care workers who don protective clothing to stave-off infection from threats such as SARS, other emerging infectious diseases, and bio-terrorism are still vulnerable to contamination, according to a Queen's University study.

"The strengths and limitations of each protective system need to be considered when recommendations are made about which choice of system, donning and removal procedures and decontamination procedures are optimal," said Queen's University anesthesiologist Jorge E. Zamora, lead author of the study.

Released on July 31 in the Canadian Medical Association Journal (CMAJ -- <http://www.cmaj.ca>), the study compares two kinds of recommended protective clothing systems and found that one kind of protective gear leaves health-care workers prone to contamination at their forearms, wrists, hands and necks. Another more elaborate ensemble, while proving more protective, was time-consuming for these workers to don and remove without making procedural errors -- an important consideration, as workers must change after performing specific procedures on patients.

The studied protective gear is recommended by the Ontario Ministry of Health and Long-Term Care and the U.S. Centers for Disease Control and Prevention to protect health-care workers performing high-risk procedures in patients affected by diseases, such as SARS, that are transmitted via aerosols or respiratory droplets.

"This study provides us with a valuable first step in the examination of the relative effectiveness of protective clothing systems used by health-care workers. Future attempts to optimize health-care workers' protective clothing should involve efforts to find a solution to the different levels of protection associated with specific systems and to improve decontamination procedures," Zamora said.

He and fellow Queen's researchers John Murdoch, Brian Simchison, and Andrew G. Day, had the study's 50 participants from Kingston General Hospital put on the respective outfits and then contaminated them with an ultraviolet light-detectable spray and paste. The participants were timed and videotaped as they put on and removed their gear and any procedural violations were noted.

The enhanced respiratory and contact precautions (E-RCP) outfit, consisting of hair cover, goggles, face-shield, breathing mask, gloves and surgical gown, left participants more vulnerable to contamination particularly on the front of their necks, hands and wrists, but was easier to put on and take off. All but two of the participants donning the E-RCP experienced some contamination.

An outfit incorporating a powered air-purifying respirator (PAPR) included two protective layers adding a hood, more gloves, hooded coveralls, and boot covers to the ensemble. This outfit did offer superior protection but required more time and more procedural steps to don. Although participants were coached through both donning and removing this outfit, 15 participants made violations during the more than six minutes it took to put it on, the researchers said.

BLS: Number Of Workplace Fatalities Declined 1 Percent From 2004

A total of 5,702 fatal work injuries were recorded in the United States in 2005, down about 1 percent from the revised total of 5,764 fatal work injuries recorded in 2004, according to the Bureau of Labor Statistics (BLS). While the BLS recorded the lowest-

ever annual total for fatalities among women workers, fatalities among agricultural workers and workers under 20 years of age rose.

On Aug. 10, the BLS released its Census of Fatal Occupational Injuries in 2005, finding that the rate at which fatal work injuries occurred in 2005 was 4.0 per 100,000 workers, down slightly from a rate of 4.1 per 100,000 in 2004. According to the BLS Census, fatal falls declined 7 percent, construction fatalities declined by 4 percent, and fatal work injuries among roofers decreased by 44 percent.

"(This) report is positive news for our nation and all workers," said Ed Foulke Jr., OSHA's administrator. "The overall decrease in workplace fatalities is the third-lowest annual total recorded since BLS began collecting this data. More importantly, this shows that more men and women were able to return home safely from their jobs. Many of our initiatives to reduce workplace fatalities are showing tremendous successes, but there is still more work to do. The data ... highlight areas where our resources must be focused in order to eliminate fatalities on the job. We remain committed to doing just that."

Not all of the results were positive. Fatalities among agricultural workers climbed 23 percent, from 145 in 2004 to 178 in 2005, BLS found. Fatal work injuries among Hispanic workers increased by 2 percent in 2005 to a new series high, but due to increased employment, the fatality rate for this population was down in 2005, BLS stated. Fatalities involving foreign-born Hispanic workers were also higher in 2005, rising to a series high of 625 fatal work injuries, up from 596 in 2004. Fatalities among black or African American workers rose to 577 fatal work injuries in 2005 from 546 in 2004.

Higher numbers of fatalities were observed for both younger workers (19 years of age and younger) and older workers (55 years of age and older). The number of fatalities among younger workers was up 18 percent (166 fatalities, up from 141 in 2004). Fatal work injuries among workers 55 years of age or older rose to 1,499 -- a series high for this population -- though the fatality rate for older workers was lower.

AFL-CIO President John Sweeney stated that the BLS census shows a worsening situation for many of the nation's most vulnerable workers. "While some groups of workers saw improvements, in 2005 job deaths increased among Latinos, Blacks, children, immigrants and agriculture workers. Sadly, but not surprisingly, these numbers confirm that under the Bush administration, workers at the bottom of the economic ladder are paying a very heavy price."

The BLS found that transportation and material moving occupations accounted for the highest number of fatalities of any major occupational group (1,543 fatalities, up 2 percent from 2004). Fatalities among motor vehicle operators accounted for 71 percent of all fatal work injuries in this occupational group and were higher by 7 percent in 2005. However, fatalities involving air transportation workers were down 26 percent (from 109 in 2004 to 81 in 2005).

Twenty-six states reported lower numbers of fatal work injuries in 2005 than in 2004, 22 states and the District of Columbia reported higher numbers, and two states were unchanged. Four states reported increases of at least 20 percent (Mississippi, Montana, New Hampshire and Wisconsin), while five states reported decreases of at least 20 percent (Alaska, Hawaii, Nebraska, New Mexico and West Virginia).

A total of 29 work-related fatalities were attributable to hurricanes and their aftermath in 2005. Hurricane-related fatalities were concentrated in three states -- Mississippi (10 fatalities), Louisiana (8 fatalities), and Florida (8 fatalities).

Virtually all of the hurricane-related cases in Mississippi and Louisiana were attributed to Hurricane Katrina, while about half of fatal work injuries attributed to hurricanes in Florida were associated with Hurricane Wilma.

Additional information on the Census of Fatal Occupational Injuries in 2005 can be accessed at <http://www.bls.gov/news.release/cfoi.toc.htm>.

Study: Workers' Comp Costs in 2004 Outpaced Benefit, Medical Payments Combined

Employers' spending on workers' compensation in 2004 grew faster than combined cash benefits for injured workers and medical payments for their treatment, according to a study issued by the National Academy of Social Insurance. The cost increase in 2004 (the most recent year for which data are available) continues a trend that began after 2000, when workers' compensation costs and benefits relative to wages were at their lowest point in the last 15 years.

Total workers' compensation benefit payments for injured workers rose by 2.3 percent to \$56 billion, while employer costs rose by 7 percent to \$87.4 billion.

"The fact that employer costs rose faster than payments for benefits and medical care reflects broader developments in the insurance industry," said John F. Burton Jr., of Rutgers University, who chairs the panel that oversees the report. "Employer costs reflect rising premiums insurers charge to cover future benefit costs. The recent rise in costs appears to be part of a longer cycle of ups and downs in the insurance market."

Relative to wages of covered workers, benefit payments fell by 3 cents for every \$100 of wages in 2004 -- from \$1.16 to \$1.13. Most of this national decline can be attributed to changes in California, where medical benefits dropped by 10 cents per \$100 of covered payroll. Nationally, the costs to employers -- primarily the premiums they pay for workers' compensation insurance (or the benefits they pay plus administrative costs if they self insure) -- rose by 3 cents per \$100 of wages, to \$1.76 in 2004. The increase in costs in 2004 was the smallest annual increase since the current cycle of higher costs

began in 2001, and Burton suggests, "This development may signal a period of more modest increases in workers' compensation costs."

Despite the recent rise in costs, both costs and benefits in 2004 remain far below their peak levels relative to wages. Total benefits peaked in 1992 at \$1.68 per \$100 of covered wages, which is 55 cents higher than the most recent figure. Costs to employers peaked in 1990 at \$2.18 per \$100 of wages, which is 42 cents higher than in 2004.

Burton stated: "The decline in employer costs in the 1990s occurred as favorable investment returns led insurance companies to cut premiums in order to expand their market shares. Costs also declined in the 1990s because of the drop in benefits paid to workers. After 2000, low interest rates and poor stock market returns led insurers to raise premiums in order to cover future benefit costs."

Since 2000, the growth in benefit payments all stemmed from increased spending for medical care. Spending for medical treatment grew from 47 cents per \$100 of wages in 2000 to 53 cents per \$100 in 2004. Spending for cash payments to workers relative to wages was the same in 2004 as in 2000 -- 60 cents per \$100 of wages.

Additional information on the report, *Workers' Compensation: Benefits, Coverage, and Costs, 2004*, can be accessed at <http://www.nasi.org>.

NIOSH Documents Discuss WMSD Risk Factors, Ergonomic 'Best-Practices' For Mechanical And Electrical Trades

On July 10, NIOSH announced it posted on its Web site documents derived from a meeting involving researchers, contractors and trades people representing piping (or plumbing), heating and air-conditioning, and electrical sectors of the U.S. construction industry. The documents discuss work-related musculoskeletal disorder (WMSD) risk factors and injury or illness data for the mechanical and electrical trades, as well as ergonomics "best-practices" provided by stakeholders.

Work-related musculoskeletal disorders (WMSDs) are a major cause of injury and illness in the construction industry. In the year 2000, according to the Bureau of Labor Statistics, WMSDs accounted for 28 percent of the injuries and illnesses resulting in days away from work for construction workers. Disabling WMSDs deprive workers of their livelihood and also place burdens on construction firms, especially smaller contractors, in the form of lost productivity and increased workers' compensation expenses.

The construction industry presents unique obstacles for contractors and workers interested in preventing WMSDs, NIOSH states. These obstacles include a reliance on physical strength, traditional work methods, multiple employer work sites and the continually changing work environment. According to NIOSH, mounting evidence

suggests that many of the above risk factors contributing to the occurrence of WMSDs in the construction industry can be decreased and, in some cases, eliminated.

In February 2002, 60 researchers, contractors and trades people attended a two-day meeting organized by NIOSH researchers. The format of the meeting included presentations describing WMSD risk factors and injury or illness data for the mechanical and electrical trades, as well as trade-specific breakout sessions. Edited transcripts of the presentations with questions and answers are included in the documents.

The documents can be accessed at <http://www.cdc.gov/niosh/docs/2006-119/default.html>.

Study: Wellness Programs Pay Dividends For Participants

A study of a demonstration project led by Community Health Councils Inc. in Los Angeles shows how incorporating physical activity and healthy eating into an office or other organizational culture pays dividends for participants.

Published in the July 2006 edition of the peer-reviewed journal *Health Promotion Practice*, the study finds that a six-week wellness-training program significantly increases vigorous physical activity among participants. A 12-week curriculum, meanwhile, boosts fruit and vegetable intake while reducing feelings of sadness and depression, and can even reduce waistlines.

"Creating a culture of healthy living within an organizational framework requires buy-in by leadership, staff and clientele," said Dr. Antronette K. Yancey, lead author of the study and associate professor of health services at the University of California, Los Angeles (UCLA) School of Public Health. "Both the physical and social environment must change.

"The model we studied holds promise for extending the reach of worksite wellness programming to organizations, at-risk populations and communities not traditionally engaged by such efforts," she added. "However, many obstacles to organizational and individual engagement are apparent. Recommendations include offering a flexible menu of options that may be tailored to each organization and developing strong intra-organizational connections throughout the program to improve sustainability."

The Racial and Ethnic Approaches to Community Health (REACH) 2010 demonstration project, led by Los Angeles-based Community Health Councils, adapted and implemented an organizational wellness intervention originally developed by the local health department. The program provides training in incorporating physical activity and healthy food choices into the routine "conduct of business" in a variety of predominantly public and private, nonprofit agencies.

"Our goal is to increase life expectancy and improve quality of life for all ages by helping communities support programs that eliminate health disparities experienced by racial and ethnic minorities," said study co-author Lark Galloway-Gilliam, executive director of Community Health Councils. "The focus of the CHC Organizational Wellness Program is on cardiovascular disease (CVD) and diabetes within the African-American community, where CVD rates are 20 percent higher for black men and 40 percent higher for black women compared to their white counterparts. And African Americans are 1.8 times as likely to have diabetes as whites."

UCLA examined the results of the CHC study of 35 organizations. More than 700 staff, members or clients -- mostly overweight African-American women -- within those organizations completed a 12-week or a six-week curriculum.

Among the findings contained in the UCLA analysis of the program:

- Feelings of sadness or depression decreased significantly among 12-week participants; fruit and vegetable intake increased significantly and body mass index decreased marginally with the 12-week program, with no significant changes in these measures in the six-week group.
- The number of days in which individuals participated in vigorous physical activity increased significantly among six-week participants but not in the 12-week group.
- Attendance and retention rates between baseline and post-intervention assessment were quite low for the 12-week curriculum (30 percent to 37 percent retention) but substantially higher for the six-week offering (66 percent attendance and 60 percent to 92 percent retention).

Study: Exercise More Effective Than Ergonomics In Treating Work-Related Ailments

Physiotherapy and ergonomic adjustments have limited effectiveness in treating work-related complaints of the upper body, according to a review by Arianne Verhagen, Ph.D., and her colleagues in the Netherlands. Exercise, however, emerged as a more effective method to treat chronic complaints, the researcher said.

As for ergonomic equipment like special keyboards and office furniture, little scientific evidence currently exists to support their use, according to Verhagen, a physical therapist and epidemiologist at the Erasmus University Medical Center, Rotterdam.

The review, titled "Ergonomic and physiotherapeutic interventions for treating work-related complaints of the arm, neck or shoulder in adults," appears in the current issue of *The Cochrane Library*, a publication of The Cochrane Collaboration (<http://www.cochrane.org>).

Verhagen updated a review published in 2003, which had included 15 trials. She added six new trials for a total of 2,110 adult participants. Most were industrial workers or hospital staff who suffered with chronic complaints varying between three and 12 months. Workers with inflammatory or neurological diseases were not included.

The randomized and nonrandomized controlled trials evaluated more than 25 interventions including exercises, relaxation, ultrasound, biofeedback, myofeedback and workplace adjustments.

Verhagen said she is not surprised that exercise appeared most helpful to people suffering from chronic complaints of the arm, neck or shoulder.

"I am an evidence-based person, and exercise seems to be the best intervention from this review," Verhagen said. "That's what I do. When I treat patients, I know that they almost always get better."

Orthopedic surgeon Nicholas A. DiNubile, M.D., a clinical assistant professor at the University of Pennsylvania, said he agrees that there is limited scientific proof that certain interventions are effective for these injuries.

"It's not that they are not effective though," he said. "There is an important difference." An orthopedic consultant for the Philadelphia 76ers and the Pennsylvania Ballet, DiNubile said that he is a great believer in physiotherapy interventions such as exercise and stretching as well as ergonomic workplace adjustments and taking breaks.

"One must be very careful, however, when interpreting interventions done in a workers' compensation environment and trying to apply those findings to non-workers' comp issues," DiNubile said. He added that it is important for researchers to ask themselves whether they are really measuring that intervention -- or if social or psychosocial issues might be involved.

"What applies in work-related injuries may not always be applicable to the average person who gets an injury," DiNubile said.

Participants in the Cochrane review come primarily from the United States and Europe. Verhagen said that she does not believe that workers with chronic pain would report that a particular intervention was not effective if, in fact, it worked. These factors were not considered in her study.

"I think normally, people would like to go back to work," she said.

The quality of these studies was poor, Verhagen said, making it difficult to draw more conclusions about the effectiveness of many of these interventions. One limitation centered on varied and vague definitions of "work-relatedness." In the Netherlands, "work-related" means that people have complaints that get worse when they are working, yet decrease or diminish on the weekend or when they are on holiday.

Study: Extra Weight on Employees Means Health Care Cost Increases

Medical and pharmacy costs rise steadily for each percentage that an employee is above normal body weight, reports a study in the July *Journal of Occupational and Environmental Medicine*, official publication of the American College of Occupational and Environmental Medicine (ACOEM).

Led by Feifei Wang, Ph.D., of the University of Michigan, the researchers used a database of nearly 36,000 auto workers and their spouses to analyze the relationship between body weight and health care costs. Using height and weight data, the researchers calculated each subject's body mass index (BMI), a standard measure of the relative percentages of fat and muscle mass. The formula for calculating BMI is the person's weight in kilograms divided by the height in meters squared.

Starting at a BMI of 25 -- the lower end of the "overweight" range -- health costs rose steadily along with BMI. Adjusted for age and gender, annual medical costs increased by about \$120 (4 percent) for each one-point increase in BMI. Drug costs increased by \$83 (7 percent) per one-point increase.

Costs continued to rise for subjects within the "obese" category -- BMI of 30 or higher. For a person with a BMI of 35, medical costs were nearly \$600 higher and drug costs were \$413 higher than for a person with a BMI of 30.

Higher BMIs were linked to increased health costs in 11 of 18 disease categories, with the greatest impact on costs for musculoskeletal and circulatory diseases. For each one-point increase in BMI, costs related to diabetes increased by about \$6 and costs for heart disease increased by \$20. For each step up in BMI, the likelihood of diabetes medical claims increased by 12 percent and claims for heart disease increased by 5 percent.

Previous studies have shown that health costs rise along with BMI. However, these prior studies have tended to overlook the fact that health costs also increase for people who are underweight -- BMI of 17 or less. The new study was designed to provide more accurate estimates of the rate of cost increase at BMIs above the normal weight range -- BMI of 18 to 24.9.

Dollar estimates of the increase in health costs per unit of BMI are likely to vary across industries and insurance types. However, the researchers believe their results provide a simple way to quantify the costs associated with obesity. For employers, the data will give an idea of the savings possible through weight loss in overweight or obese workers, or the costs associated with weight gain.

Wang and colleagues call for "more strategic and effective ways" of addressing continued increases in obesity and associated health costs. "Creative approaches are needed to reach a higher percentage of the obese population and modify their behavior in the long run."

In a 2004 study, Wang and associates found that moderately and very active employees cost approximately \$250 less in paid health care per year than sedentary employees across all weight groups. The difference was about \$450 annually per person in the obese subpopulation.

GIVE YOUR BACK BREAKFAST IN BED

Your body is a marvelous machine. As you sleep, it shifts blood and warmth from the back muscles to other areas such as the kidneys, liver, stomach, and other organs that need them all night. When you wake up in the morning, the lack of blood flow and movement in your spine makes it vulnerable to strains and sprains. Muscles are tight, and facet joints are dry; face it, your back is just not always ready for the day.

One of the best things you can do to reduce the risk of back strain or injury is to stretch before you get out of bed. Stretching will start to warm, limber, and lubricate your back. Try something as simple as lying on your back in a relaxed, comfortable position with your legs extended. Slowly raise your arms comfortably over your head keeping your legs extended. Gently reach with both arms as far over your head as you comfortably can. Then, add your legs and toes to the exercise, pointing your toes toward the foot of the bed.

Next, slowly bring one knee up at a time as close to your chest as you can. Then slowly straighten your leg back out.

Remember to stretch only to the point of mild tension, hold the stretch for ten seconds, and then allow your whole body to relax. For maximum benefit, repeat this stretch a few times. For your back, it's like breakfast in bed.

Safety Training Strategies – "ASK ME" STICKERS

A company recently conducted a series of safety "stand downs" on several of their drilling rig locations. Drilling operations were shut down for several hours on each rig to demonstrate the company's commitment to safety without regard to production. During this complete shut down of the rig, a series of safety discussions were lead by management discussing safety goals, performance, and telling their own reasons for being committed to safety.

Offer hard hat sticker for everyone, but indicate that the sticker has some "strings" attached to it. (Some employees collect and trade these stickers and most really want any sticker they can get.) I explained that this sticker was different from all the rest. The

ticker said "Ask me about safety leadership." To qualify for this sticker, employees have to be willing to explain it to anyone who asks them. Challenge them that that if they were ready to make a serious personal commitment to work safely both on and off the job, and to become a true safety leader, because they believed that it was the right thing to do, that they could come up to the front and take one of the stickers and attach it to their hard hat as a way of symbolizing their commitment.

Explain to them that you did not want them to take this decision lightly. Emphasize that their co-workers would hold them accountable. Many were ready to accept the challenge, took it very seriously and came up. Some may not take a sticker, but you could tell they were thinking about it. You can't make them work safely; they have to decide for themselves. But by having them take the sticker, they would personally accept the challenge.

Safety Training Strategies – PPE Strip-Off (offered by Darlene M. Bartlett, from the Columbia County Board of Commissioners)

In preparing a safety talk on personal protective equipment involving personnel who were skilled long-term employees, knew their jobs, and usually did pretty well using PPE, try to do something unusual to get their attention - especially if you are an outsider.

Step out during the meeting while the group is handling department business and returned just in time for your portion of the meeting. Your appearance may be first met with silence and then you may hear laughs and comments as you model the latest style of PPE: Hard hat, shaded safety glasses, gloves, vests, shoe covering, etc. Wearing it all could look pretty ridiculous, but you can emphasize that PPE is usually not the most attractive attire and sometimes can be uncomfortable.

As the discussion on the importance of PPE continues, begin to remove each item of protective equipment allowing them to see underneath, where you could have a patched eye, bandaged head, wrapped hand and a cast on one foot: the type of injuries that may occur without proper PPE. The employees could quickly realize and decide that PPE didn't look so bad after all.

WORSE THAN BEING BLIND

"Hearing impairment is among the nations' leading chronic physical disabilities, and its impact on sufferers has few equals." -- *Prevention Magazine*

At least 18 million Americans has some kind of hearing impairment. About 2 million are

nearly or totally deaf which has often been called a "miserable condition." Most people who lose their hearing lose it gradually, beginning in their youth, and in ways that are largely preventable. Sometimes the loss is so gradual the person doesn't realize there has been any damage until after there's a significant (and permanent) shift in their hearing level.

People with hearing impairment often withdraw socially to avoid the frustration and embarrassment of not being able to hear what others are saying. Their feelings of frustration and powerlessness at being unable to communicate may result in severe depression. In fact, it appears that Helen Keller made an accurate statement when she said that being deaf was "a worse misfortune" than being blind.

Loud noises are the largest single culprits that cause hearing loss due to injury. Loud noises can damage fragile hair-like structures in the inner ear, which pick up and transmit sound to the brain. The longer the exposure to noise and the louder it is, the more damage will be done to these cells. Unlike most other injuries, "hairs" that are ruined are not replaced. The hearing loss that results is permanent.

When you consider how devastating it is to lose your hearing and how easy it usually is to wear the proper hearing protection, it becomes obvious how foolish it is to risk this precious sense.

HOW TO COOL SOMEONE OFF

Even when a person drinks plenty of fluids, the heat can still overcome a person. A victim of heat illness needs help right away. The important thing is to cool him or her immediately. To cool the victim, you can use several approaches depending upon the circumstances:

1. Move the person into the shade, into a cool room, or to an air-conditioned building or car.
2. Spray the victim with a hose, or pour a bucket of water over him or her (not in the face). Tell the person what you're going to do, and do not use these measures if the victim is confused.
3. Wrap the victim in wet towels or sheets and then turn on a fan.
4. Place cold compresses on the victim's neck, groin, and armpits.
5. If medical help is not immediately available and you suspect heatstroke, immerse the victim in cold water (bath, lake, stream), but only if you can carefully monitor his level of alertness, breathing, and circulation.

6. Once the person's temperature is down to 100 degrees F, you can ease up on your cooling efforts, but keep checking the victim's temperature every half-hour for the next 3 to 4 hours. There is a possibility it may rise again.

Safety Tidbits (from "Safety Stuff" by Richard Hawk Inc.

<http://www.richardhawkinc.com>)

- Marie and Pierre Curie's notebooks recording their radium experiments are still radioactive.
- Tree sap is a conductor of electricity--big reason why it's dangerous to stand under a tree in a storm.
- Eating spicy foods is a common cause of stinky feet.
- A small riding mower generates three times the "throwing power" generated by a .357 Magnum pistol.
- Botulism bacteria are so toxic that one pound could kill every human on Earth.
- More than 30 people die and another 400 are injured in the U.S. every year from using charcoal grill inside houses, under tents, and in garages.
- Hurricanes don't leave their hemispheres of origin.
- At least nineteen people have accidentally boiled to death in Yellowstone's hot springs, more than have been killed by its bears.
- The loudest animal sound is produced by the blue whale--a 188 decibel whistle!
- You are more likely to get stung by a bee on a windy day.
- Your annual risk that you will be seriously injured at home: 1 in 81.
- As many as 275 bacteria colonies are exchanged during a kiss.