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Experts say self-efficacy is key to adhering to fitness program

Misperceptions, misinformation can be barriers to ongoing exercise

It's the $64 Question of the wellness profession: Now that we've got our employees on a program, how do we ensure that this becomes a permanent lifestyle change?

An article in the November/December issue of the American College of Sports Medicine's (ACSM) *Health & Fitness Journal* offers the assertion that self-efficacy is the key to program adherence.

"One of the greatest barriers to exercise is the perception that it takes special skill, ability, or knowledge to have a successful experience," writes Jeff Schlict, PhD, director of the Physical Activity Counseling Center at the University of Connecticut, and one of the article's authors. "And we know that the most important thing a personal trainer or exercise leader can do is help people overcome that misinformation."[1]

Other experts in exercise psychology agree. "I think self-efficacy is really a scientific way of describing what we talk about as self-confidence," notes **Shane Murphy**, PhD, of Gold Medal Consultants, a sports psychology consulting firm in Trumbull, CT. "Research shows it is the critical factor in adherence." Murphy's practice involves working with athletes, teams, and organizations to improve all aspects of their performance.

"What we have found and what the literature supports is that one's

KEY POINTS

- Confidence level is one of the most accurate predictors of future performance
- Mastery, modeling, and a pat on the back go a long way
- Self-efficacy must be measured when using stages of change model

confidence level is a better predictor [of success] than past performance," adds **Susan Watts**, MeD, NCC, associate director, behavioral science and health promotion, at The Cooper Institute for Aerobics Research in Dallas.

Taking a closer look

The authors of the ACSM article spend a great deal of time defining and parsing self-efficacy. Defining self-efficacy as "a person's perception of his or her own ability to perform a given task," they identify it as a component of Social Cognitive Theory (SCT), created by Stanford University's Albert Bandura, PhD.[1]

People with high exercise self-efficacy, they explained, "believe they have the knowledge and the skill to engage in exercise successfully. It is important to note that self-efficacy is behavior-specific, which means that someone with high self-efficacy regarding cardiorespiratory exercise does not necessarily have high self-efficacy regarding resistance training."[1]

"I think the key issue SCT took up was what exactly is self-efficacy — what are the dimensions that make it up?" offers Murphy. "I think [the authors] have helped us clarify exactly what sort of factors have an effect on long-term success. They also illustrate the importance of what we say to ourselves, the images we carry around about how we will perform in certain situations, and our emotional response to certain situations."

Building self-efficacy

To build or improve self-efficacy, said the ACSM authors, four key elements must be present:

1. Performance mastery. Generally considered the best way to enhance self-efficacy, this involves teaching proper exercise principles and techniques, and then giving employees the opportunity to practice what they have learned.

2. Vicarious experience. Also known as modeling, this involves having successful role models to observe.

3. Verbal persuasion. Employees need positive feedback about their ability and progress.

4. Emotional arousal. Inform your employees about the benefits of exercise and the health risks associated with sedentary lifestyles. **(For helpful hints on putting those elements into practice, see article, p. 15.)**

"This description is very accurate in terms of the stages presented," says **Chuck Eier**, senior fitness specialist with Quaker Oats Co. in Chicago.

Eier describes how he seeks to create performance mastery for his employees. "We give a demonstration of how to do [the exercise] properly and safely. Then, we make sure the employee is doing the exercise in a manner that will get the best results. This is especially important in strength training; in that field, technique and methodology are everything — if you don't do things properly, you're more likely to hurt yourself. Running, walking, and using the treadmill are not so technique-oriented."

Typically, his staff will demonstrate technique on an individual basis. The fitness center is kept open 14 hours a day to give employees ample opportunity to practice the techniques they have learned.

Eier and his staff strive to be decent role models for their employees by getting regular exercise themselves, "but we like to use other people's successes here in the fitness center as role models," he says. "When we know someone has had a significant weight loss, or has lowered their blood pressure, we post those success stories on the wall in the fitness center."

"Research indicates there are two factors that help modeling," adds Murphy. "First, there's modeling similarity. In other words, someone who's in optimal shape may not help motivate you. But, if someone who looks much like you is doing it, you start to feel that if they can do it, you can, too. Another important factor is not necessarily mastery modeling, but coping modeling. Seeing another person struggle, but persist and overcome, seems to provide more inspiration."

Turning to verbal persuasion, Murphy's recipe is simple: "People really like that external pat on the back. Often, a client will not need much more

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Putting theory into practice

Defining self-efficacy and identifying its key elements is one thing; transforming theory into reality is quite another. In the article, "How to help your client stick with an exercise program," in the November / December issue of the *Health & Fitness Journal*, the authors outline the following prescription:

• **The preliminary interview.** The goal of this technique is emotional arousal through education. During this meeting, you have an opportunity to find out what employees hope to gain from exercise. You can build emotional arousal by explaining the physiological changes that occur with regular exercise, and discuss whether the employee's expectations are realistic and / or attainable. You can also probe to see how self-efficacious the individual is.

• **Social interaction and observation.** This affords vicarious experience both through meeting others with similar goals and observation of others performing similar tasks. You can introduce employees to current fitness center members who have successfully attained similar goals. The role model's characteristics should match the employee's as closely as possible. If you have them available, provide the employee with videos that demonstrate the fitness assessment process and / or proper exercise techniques.

• **Fitness assessment**: This engenders emotional arousal through education and verbal persuasion through feedback. Perform the assessment after you have interviewed the employee and allowed them to observe others. When you explain how the tests relate to exercise and health, you create a learning opportunity. Corrections and compliments during cardiorespiratory and muscle fitness tests can also enhance self-efficacy.

• **Exercise programming and demonstration.** This provides verbal persuasion through feedback, and performance mastery through the mastery of simple exercise components. When introducing a new exercise, break it down into sequential components and demonstrate each component independently. Once the first component has been mastered, move to the next, until the entire sequence has been mastered. ■

than that. But people also need to internalize that pat on the back, to say to themselves, 'I'm doing well. I enjoy this,'" he says. "The challenge for wellness programs is to get people away from the attitude that 'this exercise is good for me, but I hate it.' We need to change that around to, 'This is a fun activity.'"

You can do this, Murphy suggests, by designing programs that are fun, and involve things people like to do anyway. "Some employees are well-suited to more traditional forms of exercise, but others want to hang out with their friends. For those people, something like a workplace volleyball league would work much better."

As for emotional arousal, Murphy recommends that you accentuate the positive aspects of exercise. "The research is clear: The fear factor doesn't lead to persistent change in behavior," he says. "People need to feel the benefits of what they're doing. For example, most people who become more active very quickly recognize the benefits in terms of energy, concentration, and better sleep. You can induce them to focus on these positive changes by asking them how they feel. This will help make them aware that they feel better. Some research shows that self-monitoring is also an excellent positive reinforcer, so suggest to your employees that they keep a diary or a log book."

Not every wellness professional is going to be an expert at emotional arousal, Eier warns. "I see it as having some kind of gift, to be able to get people pumped up — kind of like a coach being able fire up a team," he says. "Some people can do it really well, while others may be so-so."

That doesn't mean you don't try, he adds. "If you tell employees the positive aspects of exercise and what they can gain, you may really get them stoked up, or you just may help them realize the importance of exercise. Sometimes, that may be enough."

Incentives are always a good idea for encouraging program adherence, notes Murphy. "Everything we've learned about how people their manage own behaviors tell us that reward and punishment are critical factors. If there are incentives to try certain things, they will. Then, there needs to be some maintenance reinforcement — whether it's group activities or benefits they can earn. You need to be able to continually reward

SOURCES

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yourself [for adherence]."

Watts notes that where an employee falls within the "Stages of Change" model (precontemplation, contemplation, preparation, action, or maintenance) is directly related to self-efficacy. "Self-efficacy really comes into play when you're dealing with someone who is ready to take action or who is maintaining," she explains. "We use self-efficacy as a measure to predict future performance. When we look at someone who is just beginning to regularly perform, we question whether they will continue to exercise when they are tired, when it's raining, when they travel, and so forth."

Avoiding relapse

As a behavioralist, says Watts, it's very important to measure self-efficacy. "If we see that self-confidence is not there, we know that we need to go back and keep the person in a behavioral program for a longer period of time, or in one where they teach skill-building. Otherwise, there's a very real danger of relapse."

It's very important for wellness professionals to understand that the Stages of Change model should never be used in a vacuum. "You must also measure self-efficacy," she asserts, "but many people tend to neglect this when using the stage model. If you're not utilizing self-efficacy and then the decisional balance (pros and cons) measures, then the total 'Transtheoretical Model' simply won't work."

Reference

1. Schlict J, Godin J, Camaione DC. How to help your client stick with an exercise program. *Health & Fitness Journal* 1999; 6:27-31. ■

Risk management program saves firm $5 million

New hires assessed, then job tasks customized

A unique risk assessment and management program targeting upper extremity musculoskeletal disorders (MSDs) at a major Wichita, KS, airplane manufacturing company has saved that company $5 million in direct costs in four years. Workers compensation costs decreased 16%, 3%, 24%, and 12%, respectively, for each of the four years while work hours increased by 56%. The per-year savings breakdown for the employers were $469,990; $678,337; $1,936,105; and $1,995,759.

The program includes assessment of potential new hires and adaptation of job tasks (transitional work), when indicated by the risk assessment, education, and ergonomic and engineering remedies to identified problems.

The results of the program were published in the October 1999 issue of the *Journal of Occupational & Environmental Medicine*. Its lead author was **J. Mark Melhorn**, MD, who practices orthopedic surgery of the hand and upper extremities at The Hand Center, in Wichita, and serves as an assistant clinical professor in the orthopedics department of surgery at the University of Kansas School of Medicine, also in Wichita.

What made this program so special that it demonstrated up to a 26-to-1 return on investment?

"I think the keys are to being able to identify the individual's risk characteristics based on a statistical analysis of age, gender, inherited characteristics (genetics), work activities, home activities, and how those above five items blend together to make the person," explains Melhorn. "We looked at those five items and the medical literature, and have designed a statistical analysis instrument that

KEY POINTS

- Assessment allows for intervention before any musculosketal pain develops
- Education component proves most beneficial for total dollars spent
- Overall return on investment soars as high as 26-to-1

tells us the person's risk factor. By using that, along with known job stressors, we were able to intervene before employees had clinical symptoms of muscle pain in the workplace."

That instrument, CtdMAP, is manufactured by Wichita-based Map Managers Inc. The "Ctd" stands for cumulative trauma disorder; "MAP" was chosen because the instrument "tells the employer where he should be going," Melhorn explains. It was specifically designed for musculoskeletal disorders.

How the program works

The program began in January 1995. It was "designed to integrate a traditional occupational medicine clinic (onsite physician) and a disease-specific individual risk assessment instrument for assigning risk and implementing intervention," the authors explain.[1]

The five-step program was also designed to incorporate current guidelines offered by OSHA and NIOSH **(see box, right)**.

From January 1995 through 1998, a total of 3,152 individuals who were considered for employment as sheet metal mechanics were included in the program. Each individual's medical history was taken, and was given a post-hire, pre-placement physical exam and individual risk assessment. The CtdMAP contains 137 questions and 56 physical measurements. In a risk range of 1 to 7, 4 is average; 5 to 7 is considered above average for risk of developing musculoskeletal pain.

People with scores of 4 or lower were simply integrated into the work force. Those with scores of 5 and higher were assigned to transitional, or temporary, work. That meant they were given the same job activities, but the number of hours they worked was limited. There was also a limit on the amount of time they could work with power and vibratory tools.

Individuals with a risk score of 6 or higher were allowed even fewer hours with such tools. Those with a score of 7 were limited still further, both in terms of hours on those tools and on the time they spent performing repetitive motions. People with higher risk for lower extremity and back injuries were also instructed in appropriate body mechanics and lifting techniques.

"Those employees at higher risk were given the opportunity to accommodate to the workplace," Melhorn explains. "A pro athlete is not asked to run five miles the first day; he's allowed to build up to it. There's no reason to treat employees differently; their job is their athletic component."

After a period of four weeks, all those employees with scores of 5 and higher were re-evaluated by the occupational physician. Those with initial risk scores of 5 or 6 who had no symptoms resumed regular work without restriction. Those with an initial risk score of 7 who had no symptoms were then given a risk score of 5, transitional work guidelines for seven days, followed by re-evaluation. After those seven days, if they still had no symptoms they were allowed to perform

The Five Steps of the Intervention Program

1. Organization
- Employer commitment
- Prevention committee
- Medical consultants

2. Data collection and protocols
- Problem identification
- Data collection
- Protocols
- Ergonomic
- Medical
- Educational

3. Risk identification
- Risk-assessment instrument
- Individual risk factors
- Employer or workplace risk factors

4. Risk analysis
- New data collection
- Analysis effects
- Review of protocols

5. Risk resolution plan
- Recommendations
- Implementation of change
- Ergonomic
- Education
- Engineering modification
- Design changes

Repeat steps 3, 4, and 5 for total quality management

Source: Melhorn MJ, Wilkinson L, Gardner P, et al. An outcomes study of an occupational medicine intervention program for the reduction of musculoskeletal disorders and cumulative trauma disorders in the workplace. *JOEM* 1999; 10:833-846.

regular work, with the caveat that they immediately report any symptoms.

What worked best?

The researchers used six outcome measures in their study:

1. Recordable case incidence rate (CIR). The number of OSHA 200 recordable injuries or illnesses that occurred per 200,000 hours.

2. Lost time case incidence rate. Those incidents in the first outcome that resulted in the employee not being able to return to work on the next scheduled workday.

3. Lost time severity incidence rate. The number of workdays away from work of incidents in the first outcome for those who are either unable to return to regular work or for whom the employer is unable to accommodate in temporary restricted work.

4. Airplane production.

5. Costs of the intervention program.

6. Estimated workers' compensation costs.

All of those were calculated per employee or per 200,000 hours worked. The highlight results were provided above; the complete study gives a detailed breakdown of results in each area, along with an explanation for those results. But for a wellness professional, an even more important question might be: Which were the most effective risk reduction strategies?

"I would say the education component is probably the most beneficial for the dollars spent," Melhorn offers. "The job modification and rotation is best for high-risk individuals; but if you're looking for the biggest bang for your buck, identifying which people are best suited for education is probably it."

Inside the CtdMAP, Melhorn explains, is a subscale that tells the employer who is more or less likely to respond to education. "So, you can even focus more attention to those specific people"

Melhorn draws other valuable conclusions from the study. "First of all, the employer should be given credit for having the insight that there needed to be some sort control [of injury costs]. After that management commitment, then the key is developing an appropriate instrument that provides you with valid statistics. Our tables have specific recommendations geared to specific numbers; that's a lot better than just saying, 'This employee is at risk; now, what do we do?' That's what makes this program so powerful. Imagine how much more competitive a company becomes if it saves $2 million or $5 million?"

Melhorn believes that in order for companies to become and remain competitive in the future, they need to realize they can improve their bottom line through occupational medicine intervention programs like the one described in his study. "The best part for me, as a physician, is that the individual employee's quality of life is better. But the employer also comes out ahead, because he becomes more profitable.

"The U.S. government predicted that by the year 2000, 50% of the American work force would have some sort of occupational injury annually; and that 50% of every gross national product dollar would be spent on occupational injuries. If that pans out, the cost savings achieved through programs like this will be tremendous."

[Editor's Note: You can reach Mark Melhorn at (316) 688-5656. E-mail: melhorn@feist.com.]

Reference

1. Melhorn MJ, Wilkinson L, Gardner P, et al. An outcomes study of an occupational medicine intervention program for the reduction of musculoskeletal disorders and cumulative trauma disorders in the workplace. *JOEM* 1999; 10:833-846. ■

Risk assessment added to breast cancer campaign

NCI survey focuses on leading risk factors

AstraZeneca, the international pharmaceutical firm that helped pioneer worksite mammograms in the late 1980s, is again paving the way in employee breast health by launching a breast cancer risk assessment program for its women employees.

"Our original [mammogram] program began in 1989, and it's my understanding that for a number of years only one or two companies in the Unites States offered such screenings," notes **Sue Cox**, RN, occupational health nurse in the Wilmington, DE, U.S. headquarters of AstraZeneca. *(Editor's Note: The original 1989 program was provided by the U.S. predecessor firm of the company that is now called AstraZeneca. AstraZeneca manufactures a number of oncology drugs.)*

This long-standing program is deeply

KEY POINTS

- Age, date of first menstrual period, and first pregnancy help determine risk
- Participants wishing total privacy can participate through company Web site
- Although completely voluntary, majority of employees take part in survey

entrenched in the corporate culture, providing a firm foundation for the new risk assessment tool.

"In an employee survey taken a year ago, we found that 95% of the women here are followed on a regular basis for their mammography," notes Cox, who says the company currently employs about 1,500 women, not counting retirees or part-time workers.

"This is not a fad," Cox adds. "Everybody talks about [breast cancer screenings] everywhere I go. They see my face and they see 'mammograms' walking down the hall. I think it's because we care so much; it's a really good feeling to come to work when you know someone is looking out for you."

Cox's office also offers emergency care, dispensary care, and advice. For all of the reasons note above, she says, regular mammogram screenings have become "a given. You get to be a friend."

NCI provides tool

The new breast cancer risk assessment tool, which was added in October 1999, was developed by the National Cancer Institute (NCI), Bethesda, MD, and then approved by the U.S. Food and Drug Administration.

There are only six questions, and they do not address every single known risk factor for breast cancer. However, as the NCI explains on its Web site (www.nci.nih.gov): "Either evidence that these [other] factors contribute to breast cancer risk is not conclusive, or researchers cannot determine how much these factors contribute to breast cancer risk as precisely as with the factors listed above."

Here, then, are the six survey questions. NCI comments are added in italics to explain the significance of a particular question:

1. How old are you? *The risk of developing breast cancer increases with age.* The majority of breast cancer cases occur in women older than age 50.

2. How old were you when you had your first menstrual period? *Women who had their first menstrual period before age 12 have a slightly increased risk of breast cancer.*

3. How old were you when your first child was born? *Women who had their first full-term pregnancy after age 30 and women who have never borne a child have a greater risk of developing breast cancer.*

4. How many of your sisters, daughters or mother have had breast cancer? *Having one or more first-degree blood relatives who have been diagnosed with breast cancer increases a woman's chances of developing this disease.*

5. Have you ever had a breast biopsy? *A breast biopsy is when the doctor removes tissue from your breast to test for cancer.* Women who have had breast biopsies have an increased risk of breast cancer, especially if the biopsy showed a change in breast tissue known as atypical hyperplasia. Those women are at increased risk because of whatever prompted the biopsies, NOT because of the biopsies themselves.

6. What is your race? *White women have greater risk of developing breast cancer than black women (although black women diagnosed with breast cancer are more likely to die of the disease).*

Privacy is maintained

The survey is provided to AstraZeneca employees on a computer disk or on paper, and determines their risk score over a five-year period and their lifetime. The score is reported in numeric form, with any score over 1.66 being considered high risk.

"Each person who comes in for a breast exam (80% to 85% of the female population) is given a letter explaining the survey, and can then take the survey if they want to," says Cox. "Those who participate give us their physician's address. We get their survey, score it, then send that information directly to their doctor's office.

Employees wishing an even greater level of privacy can visit the company Web site and take the survey, do their own scoring, and take the results to their doctor.

"In any case, the employee can then sit down with their doctor and decide what to do," says Cox. "We don't want to do the counseling ourselves. I'm not a physician, and we don't have a complete health history."

Information about this new screening was put on the Web site last spring to help build early awareness. Cox has been pleased with the response.

"Several employees have said, 'Yeah, this is

great,'" she notes. "The survey is completely voluntary, and some have refused to take it, but the majority have taken it."

[Editor's Note: For more information and free publications on the prevention, early detection, diagnosis, and treatment of breast cancer, call the National Cancer Institute's Cancer Information Service at (800)-4-CANCER. Specifically trained staff provide the latest scientific information in understandable language — in both English and Spanish. People with TTY equipment, dial (800) 332-8615. For more information on the AstraZeneca program, contact: Susan Cox, AstraZeneca, 1800 Concord Pike, Wilmington, DE 19850. Telephone: (302) 886-5672.] ■

Can you 'type' your employees?

Determining who's adaptable, and who's not

The ever-changing work environment in the '90s has been a major source of employee stress and a significant threat to the emotional well-being of employees as individuals and the employee population as a whole.

While change is unavoidable, some employees are more adaptable to change than others; knowing who these employees are, and how to help those who are less adaptable, can help ensure a healthier employee population in a company whose culture is undergoing significant change. What's more, it will help ensure your company's future success.

"No strategy will ever succeed if the people are unwilling or unable to implement it," says **David Hofrichter**, a vice president of The Hay Group, a worldwide management consulting firm in Philadelphia. "Too many companies have focused on implementing strategy and ignored the basic concept of whether they have the right people to make it work."

Superstars and Recalcitrants

While every employee is an individual, many of the people who work in your company fall into four major groups — Superstars, Open-minders, Skeptics, or Recalcitrants — according to The Hay Group. Knowing more about the composition of your employee population, and how they fit into those categories, can give you invaluable insight into whether they will readily adapt to a changing work environment, and whether morale can be maintained through significant shifts in corporate culture.

The following is an outline of those four categories, and how to approach employees within each group.

1. Superstars. These people have internalized the company's vision and have the right behaviors and competencies for success. They create value and leverage themselves and others' talents. Set these employees up as an example of what your company can be:

- Do whatever it takes to retain them.
- Reward their exceptional talent handsomely.

2. Open-minders: Even though some of these employees may have underperformed in the past because of poor skills or weak competencies, they are ready to align themselves with the new culture and are eager to be part of the plan. With development, they will be contributors. The recommended strategies:

- They are worth investing in; get them trained fast.
- Educate them to improve their competencies.
- Bring in coaching and competency evaluation to help them identify and improve their weaknesses.
- Reward them well when they improve.
- Spend your development dollars here to get the most payoff.

3. Skeptics. These employees perform well, but they are doubtful about changes being touted from top management and have taken a "wait and see" attitude. Their ability to deliver results is clear; they need to learn how to do it in new ways. Many times, those are the people who get results, but have a lot of "dead bodies" in the course of the process. This is the critical employee group. About one-half will see the light, want to change, and will become Superstars. The rest will move into the Recalcitrants. The recommended strategies:

- Start by identifying which individuals are worth developing.
- Provide them with mentoring and coaching.
- Tie rewards to changes in behaviors and attitudes.
- Be clear about what your expectations are.

4. Recalcitrants. These employees have performed adequately — or even well — in the past, but they are entrenched in the way things have been done and are likely to resist, or even sabotage, change efforts. In most organizations, this

group represents about 15% of employees. The recommended strategies:

• These people are not worth developing or retaining; show them the door as soon as possible.

• Trying to "save" them will send the wrong message to the rest of your employees.

• Find new people who are behaviorally and emotionally in sync with the desired corporate culture.

"The new reality is to shape your strategy around the key assets you have," Hofrichter says. "Treat [employees] all the same at your peril."

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Survey shows decline in worker absenteeism

Stress-related absences triple since 1995

The good news is that unscheduled workplace absenteeism declined in the United States in 1999. The bad news? Many observers don't expect that to become a permanent trend.

Those are among the major findings in the 1999 CCH Unscheduled Absence Survey, conducted by Riverwoods, IL-based CCH Inc., a provider of tax and business law information and software for human resources, accounting, legal, securities, health care, banking, and small business professionals.

The findings

The survey, now in its ninth year, interviewed 305 human resources executives in U.S. companies and organizations of all sizes and across major industry segments, with an estimated total of nearly 800,000 employees. Among the major findings:

• There was a 7% decline in unscheduled absenteeism in 1999, a step forward against 1998's all-time high.

• The dollars lost to absenteeism decreased 20%.

• Absenteeism caused by worker stress has tripled since 1995.

• Mid-sized companies struggled with absenteeism, while small businesses showed a significant drop.

• Absenteeism in health care reached an all-time high.

• Industry sector and company size had a significant influence on absenteeism.

• Personal illness and family issues were the most-cited reasons for last-minute absences, but stress and "entitlement mentality" reached all-time highs for the second straight year.

(For a further statistical breakdown, see the chart on p. 22.)

Not a time to celebrate

Despite some positive results in the 1999 survey, "it's not time to put on our party hats," warns **Nancy Kaylor**, the human resources analyst who has directed CCH's annual survey for the past three years. "Certainly, the human resources executives we talked to don't hold out any great hopes for this [decline in absenteeism] to continue. They see it as a very small drop, perhaps even a course correction, but the news is not really that great; no one feels we should go out and start celebrating."

One of the reasons is that unscheduled absenteeism continues to cost employers millions of dollars — an average of $602 per employee per year, in fact, according to CCH. "Unscheduled absences really go to the bottom line," says Kaylor. "Ironically, there are a lot of little things employers can do to get employees to work and to save big bucks in the long term."

And, she points out, employers have put off these strategies (i.e., work-family programs, paid time off policies) for so long they've painted themselves into a box. "Businesses have ignored the problem for as long as possible. They've cut everything else, they've downsized, re-organized, and so on," Kaylor notes. "Now, when the employment market is so tight and in many cases there aren't enough employees to go around, it's imperative

KEY POINTS

- Human resource managers say decline in unscheduled absences is one-year aberration
- Stress, "entitlement mentality," are the main reasons workers don't show up
- Work/life and PTO programs key to reducing unscheduled absences

Change in Unscheduled Absenteeism Rates Since 1998

Company Size	Percent Change
99 or fewer employees	76%
100-249 employees	14%
250-499 employees	19%
500-999 employees	17%
1,000-2,499 employees	51%
2,500-4,999 employees	12%
5,000-9,999 employees	16%
10,000 or more employees	0%

Cost by Company Size

Company Size	1999 Total Annual Cost
99 or fewer employees	$13,423
100-249 employees	$72,611
250-499 employees	$125,962
500-999 employees	$442,434
1,000-2,499 employees	$961,155
2,500-4,999 employees	$2,474,337
5,000-9,999 employees	$3,423,704

Source: CCH Inc., Riverwoods, IL.

that the ones you have hired get to the office."

Ironically, just when it's so important to get employees to work, two key factors in absenteeism are growing. Stress — perhaps the more obvious of the two — is a widely recognized result of corporate downsizing. Perhaps nowhere are its effects more dramatically visible than in the health care industry, where absenteeism reached an all-time high in 1999.

"Behind this increase is an industry in a state of flux and change, impacted by regulatory issues and extreme labor shortages," notes Kaylor.

The other dynamic, "entitlement mentality," Is manifested by a "you owe me" attitude on the part of the employee. "What they say to themselves is, 'I've been working and working, doing more with less, and I've had it. I'm going to call in sick,'" Kaylor explains.

Boosting productivity

Kaylor asserts that work-life programming and paid time off strategies are the most effective ways to combat both of these threats to productivity.

For example, the banking industry showed significant improvement in unscheduled absences in 1999, and Kaylor is convinced this is due to improved work/life benefits. "They have really been moving in a big way towards work/life programming and flexible benefits," she explains. "As the proportion of women who have climbed up the corporate ladder have increased, so has the need for more dependent care and other services. The industry has responded because that's who their workers are. The most successful employers are those who know who their employees are and what matters."

The same holds true, she says, for PTO (paid time off) programs, which provide employees with a "bank" of hours to be used for various purposes, rather than separating out sick, vacation, and personal time. "With a paid leave bank, workers are able to schedule the time off and they don't have to tell that little fib when they call in. Plus, the super or the manager can plan for the person not being there," Kaylor explains. "The employees are managing their own time, so there's less of an entitlement mentality; they are being treated more like business partners. Whereas, if you have 'X' number of vacation days, personal days, and sick days, many employees will tend to take them all."

The PTO payoff

The only employees who tend to be hurt by PTO programs, adds Kaylor, are chronic sick time users.

Work/life programs, Kaylor adds, are an acknowledgement by the company that "the whole juggling act is getting tougher and tougher." As more and more companies do acknowledge this trend, they are seeing a payoff by offering such benefits, she asserts. "The types of companies who are offering such programs to employees are trying to meet them halfway — to find ways to make it possible for employees to get to the workplace and be productive."

The continued threat of unscheduled absences, combined with an extremely tight labor market, will result in an increase in such programming, Kaylor predicts. "They will not just be something that is nice to do, but that companies will have to do. Wellness, EAPs, flexible scheduling — all of these will become more of a business necessity."

[For more information, contact: Nancy Kaylor, CCH Inc., 2700 Lake Cook Road. Riverwoods, IL, 60015-3888. Telephone: (847)267-7000. Web site: www.cch.com.] ■

NEWS BRIEFS

Why UM might not save money

Are you really saving money from utilization management of worker's compensation cases? Only if you focus your UM on care that is costly and has a higher than average denial rate, according to a study published in the *Journal of Occupational and Environmental Medicine.*[1]

Researchers at the University of Washington in Seattle analyzed almost 12,000 workers' compensation cases and found that only 2% to 3% are denied overall — and many of those denials are later reversed.

Some procedures had markedly higher denial rates, such as spinal surgery (5.5%) and carpal tunnel syndrome (8.6%). In some cases, the UM program required a procedure to be performed on an outpatient basis. For example, one in three patients reviewed for hernia repair or arthroscopy were directed to an outpatient setting.

The study suggests employers target efforts on those procedures that have a higher rate of unnecessary use. It found that UM reviews of spinal surgery with and without fusion produced savings of almost $2 million, or 37.4% of the total cost savings. Rehabilitation care ($268,000 or 6.2%) and carpal tunnel release ($212,200 or 4.9%) accounted for the next greatest savings.

Reference

1. Wickizer TM, Lessler D, Franklin G. Controlling workers' compensation medical care use and costs through utilization management. *JOEM* 1999; 41:625-631. ▼

Heart attack video available

"*When Seconds Count,*" a 30-minute educational video that emphasizes the importance of early symptom recognition, quick action, and quality of care in heart attack survival, is now available to Chicago-area employers through the CCN/EPIQual Healthcare Program's "Wellness Works" program.

First aired on local cable channels, the video has also been used by the city of Portage, IN, to raise heart attack awareness. The city adopted the project after city clerk-treasurer Felix Kimbrough and firefighters Tim Sosby and Mike Brown attended the video's premiere, hosted by Genentech Inc., the Chicago Business Group on Health, and CCN/EPIQual.

Attendees were given promotional packets to take back to their work sites to encourage employees to watch the program.

"When we learned that the City of Portage was outside of the viewing area, we decided to bring this important message to our community," Kimbrough explains.

For more information, contact: Terry Merryman, CCN, 5251 Viewridge Court, San Diego, CA 92123. Telephone: (858) 654-2202. Web site: www.ccnusa.com. ▼

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NIOSH provides needlestick alert

The National Institute for Occupational Safety and Health (NIOSH) has published an alert, "Preventing Needlestick Injuries in Health Care Settings." This is the first document by a federal agency to provide broad guidance and assistance to employers, workers, and others in reducing needlestick injuries.

Some 600,000 to 800,000 occupational needlestick injuries occur every year, exposing workers to the risk of serious and potentially fatal infections from HIV, hepatitis B and C, and other bloodborne diseases.

NIOSH recommends that the use of needles be eliminated where possible, where safe and effective alternatives are not available, and that devices with safety features, such as shields and sheaths, be used.

The NIOSH alert is available on the NIOSH Web page: www.cdc.gov/niosh/2000-108.html. Additional copies can be obtained by calling NIOSH at (800) 356-4674. For additional information, contact: Fred Blosser, NIOSH Public Affairs Office, 200 Independence Ave. S.W., Washington, DC 20201. Telephone: (202) 260-8519. ▼

DaimlerChrysler/UAW garners awards

The DaimlerChrysler/UAW national wellness program received six more Well Workplace Gold Awards last November, pushing its record-setting total to 29 during the last two years.

The Wellness Councils of America's Gold Award, considered one of the most prestigious in the worksite health promotion industry, recognizes DaimlerChrysler/UAW's commitment to developing and implementing comprehensive health promotion into the fabric of their organizations.

The StayWell Company in San Bruno, CA, is the health promotion management partner with DaimlerChrysler and the UAW at 25 of the 29 Gold Award sites, and two of the six 1999 winners are managed by StayWell. "Winning six more Gold Awards is further proof of DaimlerChrysler's and the UAW's continued commitment toward improving the health and well-being of their employees," notes **David Anderson**, vice president of programs and services at StayWell.

For more information, contact: The StayWell Company, 1100 Grundy Lane, San Bruno, CA 94066-3030. Telephone: (800) 333-3032. ▼

Weight loss study planned

Houston-based Baylor College of Medicine has joined several institutions in a nine-year, nationwide "Study of Health Outcomes of Weight Loss." Researchers are seeking to obtain long-term evidence that weight loss actually results in health benefits, and to determine if interventions designed to produce sustained weight loss will improve the health of obese individuals with Type 2 diabetes.

"We know that being heavy is a problem. However, we need to know if lowering weight decreases the chances of dying and increases health," says **John Foreyt**, MD, a professor of medicine at Baylor and the study's principal investigator. "We have short-term data that says yes, but not long-term data."

The study, funded by the National Institutes of Health, will enroll 6,000 individuals nationwide. Baylor will enroll 400 participants next year. Individuals will receive counseling and drug intervention to lose weight and maintain it throughout the study.

For more information, contact: Angela Mendoza, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. Telephone: (713) 798-4712. E-mail: amendoza@bcm.tmc.edu. ■

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Body piercing can cause lifelong problems

The popular trend in body piercing has brought with it an equally unpopular trend: allergic reactions. Many of the body locations chosen for piercing have displayed an incredible array of reactions including infections, scarring, and a lifetime allergy to nickel, according to the American Academy of Dermatology (AAD).

Nickel is a ubiquitous metal used to make things shiny and bright; it's also the major reason why people break out from fashion jewelry and watchbands. Over 14% of Americans are allergic to nickel, say AAD researchers, noting that many dermatologists see a strong link between rampant body piercing and the increase in nickel allergy patients.

When it comes to ear and body piercing, "Cells in the body react to the presence of nickel in the studs used to keep the pierced site open," explains **Pamela Scheinman**, MD, a dermatologist and allergy specialist with the New England Medical Center in Boston. "The cells develop a mechanism to react against the metal, causing the skin to erupt. Unfortunately these cells — known as T-cells — develop a memory. Every time nickel comes into contact with skin, the T-Cells think they are doing your body a favor by reacting. Eyelids, a popular site for piercing, are particularly sensitive."

Nickel, cobalt, and chrome are frequently present in the fashion jewelry that is commonly used in body piercing.

Peter Bendetsen, MD, a Boston-area dermatologist who has been practicing for over 20 years, discourages piercing body parts other than earlobes. "Navels, tongues, eyebrows, and lips are far more prone to infection; the thicker the body part, the greater the chance of uncontrollable bleeding. In fact, I had to give a patient a stitch because he hit a vein while trying to pierce his own lip."

Roman Research, a Plymouth, MA-based jewelry manufacturer, offers these "Seven Pillars of Piercing Wisdom":

1. Read the label on jewelry items. All parts must be made of nickel-free alloys or surgical stainless steel.

2. If you or members of your family scar easily, do not get ears or other body parts pierced.

3. Piercing is not a do-it-yourself or group project; home sterilization methods are unreliable. Flaming a stainless steel needle to sterilize it can release nickel into the lobe, setting off a lifetime allergy.

4. One-step sterile ear piercing systems are safe.

5. Do not use nail polish or powders to coat jewelry. They only mask the piece temporarily and those other products may cause an allergic reaction, as well.

6. Fourteen-karat gold or sterling silver are no guarantee against nickel allergies; both metals contain nickel.

7. The entire jewelry piece, not just the earring post, must be made of surgical stainless steel or nickel-free gold, silver, or platinum to avoid the onset of a nickel allergy. ■

Are obese people really addicted?

Many health care professionals see out-of-control eating as an addiction, but some research points to society's fascination with food as the major culprit.

Researchers at Baylor College of Medicine in Houston reviewed several studies, and found that the inability to control eating may be the result of the conflict between primitive responses and today's environment. The review is published in a recent special edition of *Drugs & Society*.

"Humans used to have to search for food," says **Ken Goodrick**, MD, with the Baylor College of Medicine Behavioral Medicine Research Center. "Now, food searches us out."

"The current food environment is characterized by excessive advertising, large-scale grocery displays and a wide variety of readily available, high-calorie foods. In addition, society's obsession with thinness and a high stress level often lead people to find comfort in food, and then go on restrictive diets to lose the weight.

According to Goodrick, these factors lead to out-of-control eating, because restrictive dieting causes changes in the brain that make overeating more irresistible. It is those brain changes, he notes, that parallel the changes seen in drug addiction.

"Many overweight people will say that they cannot control eating, which can be a great source of frustration to them," says Goodrick. "We need to understand that many people cannot control eating any more than they can control breathing."

The findings suggest that an important first step for these individuals to take is to stop the cycle of self-blame that often accompanies overeating. The real problem, according to Goodrick, is a mismatch between a person and the surrounding environment.

"One of the healthiest things a person can do is recognize that they are part of a larger system where it is important to eat and exercise the way our distant ancestors did, and to seek support from other," Goodrick advises. "It is important for people to stop struggling with themselves about weight." ■

Depression and diabetic heart disease

Symptoms of depression — not high blood sugar — predict coronary heart disease (CHD) among people with Type 1 diabetes, according to researchers at the University of Pittsburgh Graduate School of Public Health (GSPH) in a report published in the January 2000 issue of *Atherosclerosis.*

"We believe this is the first study to show that depressive symptomology is linked to coronary heart disease in Type 1 diabetes," says **Trevor J. Orchard**, MD, professor of epidemiology at GSPH and principal investigator in the study. "These results also provide further evidence that blood sugar levels fail to strongly predict the likelihood of this complication."

Investigators say they were not surprised to identify increased depressive symptoms as a risk factor, since depression is emerging as a risk factor for cardiovascular disease in the general population. "But the strength of the link was surprising," says Orchard. "In addition, these results suggest that the high blood sugar association with the development of coronary heart disease among Type 1 diabetics is complex."

Type 1 diabetes is the more severe, insulin-dependent form of the disease, affecting nearly 1 million Americans. ■

Vitamins E, C lower risk of pre-eclampsia

Natural vitamins E and C supplements reduced the risk of pregnant women developing a dangerous condition called pre-eclampsia by 76%, according to a recent study published the in British journal *Lancet*.

Participants received a combination of 400 IU of natural vitamin E and 1,000 mg of vitamin C or a placebo during the second term of their pregnancies.

"We are excited by the results of this trial and its implication," notes professor **Lucilla Poston** of King's College in London, who coordinated the study. "We hope this study may lead to an effective treatment which will prevent the onset of this devastating illness and its consequences." To date, there are no known preventive agents for pre-eclampsia.

Pre-eclampsia is detected by high blood pressure, swelling, and the appearance of protein in the urine. Babies of mothers with pre-eclampsia are often smaller and suffer from complications, and even death. ■