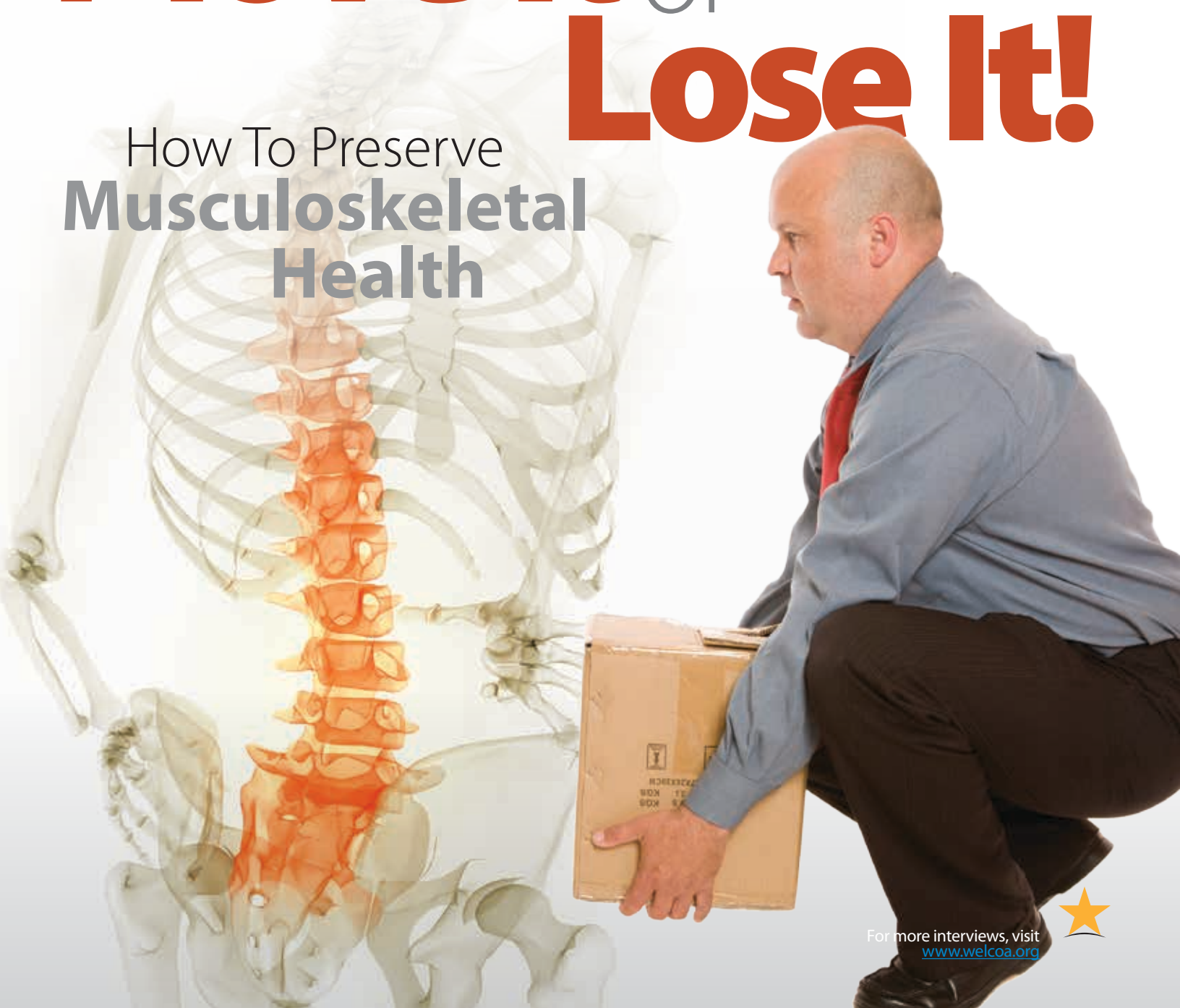


★WELCOA  
**News & Views**

**Move It** or  
**Lose It!**

How To Preserve  
**Musculoskeletal  
Health**



---

# WELCOA's News & Views

## Move It or Lose It: How to Preserve Musculoskeletal Health

An Expert Interview with  
**Erik Nieuwenhuis**

### ABOUT **ERIK NIEUWENHUIS**



Erik Nieuwenhuis is the WorkSmart Injury Prevention Specialist, Wellness Consultant, and Health Coach for St. Luke's Health System in Sioux City, Iowa. Erik graduated with a Master of Science in Physical Therapy from Des Moines University. He is a passionate leader and role model, promoting whole-person wellness (body/mind/spirit) in the workplace and across the Siouxland community. He specializes and leads the Industrial Athlete WorkSmart Ergonomics Program, which engages St. Luke's employees in musculoskeletal disorder (MSD) injury prevention and self-care of the working, aging body. He has been a wellness consultant to industry since 2000. Erik has worked with hundreds of companies from the Siouxland area and across the United States to incorporate his *WorkSmart Stretching* plan with a goal to reduce ergonomic and personal ergonomic (MSD) injury risks by 30% to 90% in 1-3 years. He is a passionate leader in promoting healthy lifestyle choices and is an advocate for 'working smart' at work, home and play.

---

### ABOUT **DR. DAVID HUNNICUTT**



Since his arrival at WELCOA in 1995, David has interviewed hundreds of the most influential business and health leaders in America. Known for his ability to make complex issues easier to understand, David has a proven track record of asking the right questions and getting straight answers. As a result of his efforts, David's expert interviews have been widely-published and read by workplace wellness practitioners across the country.

David Hunnicutt can be reached at [dhunnicutt@welcoa.org](mailto:dhunnicutt@welcoa.org).

In this WELCOA Interview, Dr. David Hunnicutt sits down with Erik Nieuwenhuis, a physical therapist, and ergonomics and worksite musculoskeletal health specialist. One of the major cost-drivers of health care today is musculoskeletal complaints and injuries, and Erik Nieuwenhuis offers his vision for the path to prevention.

In this day and age of sustained sitting at workplaces—and with more Americans leading less-active, more-stressed lives—there is a significant need to address musculoskeletal health and well-being. As we see increasing numbers of individuals with overweight or obese classifications, encouraging our employees to make positive lifestyle choices and to pick up healthy habits becomes increasingly important. In terms of our workforces' overall well-being and long-term sustainability of health care spending, musculoskeletal health and wellness is one of the most relevant issues a worksite wellness initiative can address.



**David Hunnicutt: How important is it for people to take musculoskeletal health issues seriously?**

**Erik Nieuwenhuis:** I think this is one of the most important questions for the 21st century workplace, and to control surging health care costs. I believe that musculoskeletal health is an overall reflection of a person's lifestyle habits. We are three-dimensional people (Body, Mind and Spirit), functioning in three planes of life (at work, at home and at play). Each of these are related and must be taken into account to prevent and restore the whole person's musculoskeletal health. We can improve these areas with healthy lifestyle habits and physical activity. When we do, our quality of life significantly improves—and our musculoskeletal health will help our spirits soar through whatever stress or challenges life brings.

“We are seeing significant stress-related diseases of all kinds in our musculoskeletal health, including: lower back pain, fibromyalgia, tendonitis and chronic pain syndromes of all kinds.”

**DH: What are the costs of not taking this issue seriously?**

**EN:** The costs are extreme, as we are seeing significant stress-related diseases of all kinds in our musculoskeletal health, including: lower back pain, fibromyalgia, tendonitis and chronic pain syndromes of all kinds. A report from the American Institute of Medicine in June, 2011 found that 33 percent of Americans suffer from some type of pain, which costs the United States between \$560 and \$635 billion a year.



### Self-Care Is The Best Care!

Erik Nieuwenhuis writes a Musculoskeletal Health column for the *Siouxland Business Journal*. With surprisingly simple techniques, Erik discusses practical ways to alleviate common aches and pains related to MSDs—including the staggered stance pose for safer lifting and 'do-it-yourself' tendonitis relief.





### Over 4,000 US Companies Are WELCOA Members

WELCOA's member benefits include the tools, information and resources you need to build effective, results-oriented wellness programs—programs that help you better contain costs, improve employee health and increase engagement in your workplace wellness initiatives.

#### Learn More:

[www.welcoa.org](http://www.welcoa.org)

When a person suffers with any type of pain, this greatly affects posture habits, lifestyle choices, mental attitudes, and therefore musculoskeletal health. We are seeing the effects of this in every area of culture and life in America today.

One of the best studies I've come across that links healthy lifestyle habits with lower health care costs and improved musculoskeletal health came from Duke University. This study, which was published in the Archives of Internal Medicine in April 2007, followed 12,000 employees over a 7-year period.

“Creating an early-reporting process for musculoskeletal complaints is one of the most important things our workplaces can do today to improve musculoskeletal health and productivity of employees.”

The findings indicated that as a worker's BMI increased above 25 (a healthy weight), workers' compensation costs skyrocketed—with costs doubling for musculoskeletal claims of overweight employees, and increasing four or five (or more) times for obese individuals. Especially in employees with a BMI above 30 (an obese classification), researchers also noted a significantly higher rate in lower back injuries, chronic pain, and inflammation of the knees, hips, ankles, wrists, and shoulders, which are precursors to conditions such as tendonitis, carpal tunnel syndrome and blackberry thumb, among others.

We know that 60 to 70 percent of our population is overweight, and 25 to 30 percent are obese. This is one of the primary cost drivers that are bankrupting America, driving up health care costs, and blowing up the budgets of our companies—and families, too.







### DH: How many people suffer from musculoskeletal issues at work?

**EN:** We all do to some degree. If we're truly honest, most of us have different aches or pains in our body on a daily basis, and that's really what musculoskeletal health issues and prevention are all about. All too often, prevention, treatments, and self-care options for musculoskeletal pain, injuries, or disorders (MSDs) are delayed, inaccessible, or inadequate (Institute of Medicine Report, June 29, 2011), and this is what I see in most workplaces today.

Creating an early-reporting process for musculoskeletal complaints is one of the most important things our workplaces can do today to improve musculoskeletal health and productivity of employees.

### DH: Is sitting at a desk all day toxic to human health?

**EN:** Yes, sustained sitting is extremely toxic to human health because it tightens all the major muscles of your hips and your entire body from head to toe. (Loss of flexibility, especially at the hips, is a primary risk factor for lower back, knee, hip, and shoulder MSD injuries or pain problems.)

Studies show that about 60 percent of the population sits for four or more hours at a desk every day at work, and the average American sits for a total of 14.5 hours a day. With new technologies that make our companies safer and computers that help us stay productive, in many companies today, we've engineered physical activity out of our work— and out of our daily lives too with conveniences such as rolling luggage, self-propelled lawn mowers, etc.

### WELCOA Offers Wellness Certifications

WELCOA offers a dynamic webinar and certification series—with exciting topics to help you build and sustain results-oriented wellness programs. Each session is conducted by a workplace wellness expert and the webinar format allows you to gain cutting-edge knowledge—without leaving your office!

#### Learn More:

<https://www.welcoa.org/services/learn/welcoa-training/>



### The Industry's Best Information Is In One Place

Get the 2011 Buyer's Guide—and have the health promotion industry at your fingertips! Designed to help health promotion supply meet health promotion demand, WELCOA's Buyer's Guide is the industry's best resource guide to an array of products and services.

#### Learn More:

<https://www.welcoa.org/services/connect/premier-provider-network/>

Sustained sitting starts a negative domino effect to our bodies beginning with two awkward postures (forward head posture and forward bending of the trunk), which are the most damaging to your body from head to toe, and can lead to symptoms such as headaches, lower back pain, shoulder tendonitis or rotator cuff sprain/strain and fatigue, among many others. Sustained sitting is a major cause of 'presenteeism'—and not a recipe for improving our country's vitality and quality of life.

“Movement is the best medicine, and we can break up sustained sitting postures by standing, moving and/or stretching for 3 minutes out of every 60 minutes that we sit.”

#### DH: What are the best ways for employees to prevent and treat musculoskeletal issues?

**EN:** One of the most important things is to maintain healthy lifestyle habits, including: strength-training three or more times each week, drinking 40+ ounces of water daily, sleeping 7 to 8 hours each night, and eating a healthy breakfast every morning to kick start your metabolism, muscles, and brain.

Our bodies were created to *move* and we must move at least 30+ minutes daily. Movement is the best medicine, and we can break up sustained sitting postures by standing, moving and/or stretching for 3 minutes out of every 60 minutes that we sit.



I developed the *WorkSmart Stretching* campaign, which is a series of movements and stretches that show workers ways to counteract any awkward postures that occur from sitting or doing repetitive motions at their work station, or work.

**DH: Can musculoskeletal issues be reversed?**

**EN:** Most certainly yes, they can. Not only can they be reversed, but they can be prevented.

For example, a company I worked with made the “Staggered Stance” *WorkSmart* posture a best-practice for their line workers. This company also made two ergonomic changes by reducing the width of the conveyor by approximately 15 inches (to help employees reduce their shoulder reaching and forward bending of the back), and repositioning how boxes were placed on the line to reduce awkward handling postures (and reduce risks to the neck, shoulders, elbows, wrists and hands). The company’s onsite nurses and supervisors have noted that since the implementation of the new policies, lower back and shoulder complaints and injuries seem to have disappeared. Earlier this year, this same line of employees had the highest number of OSHA recordable MSDs in those areas.

It’s amazing, but simple, small changes can significantly reduce the aches and pains we have every day.

**DH: If people follow that advice, what kind of changes can they expect to see, and how long will it take them to see these changes?**

**EN:** With *WorkSmart Stretching*, workers many times feel pain and stiffness relief, or will feel energized in as little as 3 to 15 seconds after performing the specific stretch to relieve their symptoms. One of the amazing things about the human body is that when you practice good posture habits and other MSD self-care techniques such as daily *WorkSmart* flexibility—and you stay physically active with strength training and cardiovascular conditioning—you can see very, very quick results.

**DH: So the payoff can be significant and it can happen fairly quickly if you’re serious about doing something to change?**

**EN:** Absolutely significant. I’ve been treating employees with musculoskeletal injuries at St. Luke’s for the last two and a half years. It’s been very encouraging to see how little changes, like raising your computer monitor height, can significantly reduce the risk for MSDs, like chronic headaches. It’s the simple things that matter, such as educating employees to watch their sitting posture so they’ll avoid knee pain—or teaching them how to use the proper-sized mouse and grip with their whole hand instead of just the fingertips (awkward pinch grip) to help them avoid Blackberry thumb, wrist tendonitis, and other MSDs. Small ergonomic changes can have a significant payoff for your workforce, your company’s bottom line, and each employee’s quality of life.

WELCOA'S  
**dyk**  
DID YOU KNOW...

**You Can Become WELCOA Faculty**

Take part in four or more of WELCOA's nationally-recognized certification courses and earn the elite title of WELCOA Faculty! The WELCOA Faculty designation credits those who strive to build effective, results-oriented wellness programs that change lives and transform organizations.

**Read more at**

<https://www.welcoa.org/services/recognize/welcoa-faculty/>





# Notable & Quotable

from Erik Nieuwenhuis

## Stretching Improves Your Health

The *WorkSmart Stretching* poster shows 18 exercises that help your muscles stay refreshed throughout the workday—preventing fatigue, discomfort, and reducing risks for MSD injuries. These stretches will also reduce your stress level and increase your energy level.

### Download a copy of the poster at:

[www.welcoa.org/freeresources/index.php?category=8](http://www.welcoa.org/freeresources/index.php?category=8)



## Improving Body, Mind, Spirit....

I believe that musculoskeletal health is an overall reflection of a person's lifestyle habits. We are three-dimensional people (Body, Mind and Spirit), functioning in three planes of life (at work, at home and at play). Each of these are related and must be taken into account to prevent and restore the whole person's musculoskeletal health. **PAGE 3**

## Sitting Is Toxic To Our Health...

Sustained sitting is extremely toxic to human health because it tightens all the major muscles of your hips and your entire body from head to toe. (Loss of flexibility, especially at the hips, is a primary risk factor for lower back, knee, hip, and shoulder MSD injuries or pain problems.)

Studies show that about 60 percent of the population sits for four or more hours at a desk every day at work, and the average American sits for a total of 14.5 hours a day. With new technologies that make our companies safer and computers that help us stay productive, in many companies today, we've engineered physical activity out of our work. **PAGE 5**

## Getting Quick Results...

With *WorkSmart Stretching*, workers many times feel pain and stiffness relief, or will feel energized in as little as 3 to 15 seconds after performing the specific stretch to relieve their symptoms. One of the amazing things about the human body is that when you practice good posture habits and other MSD self-care techniques such as daily *WorkSmart* flexibility—and you stay physically active with strength training and cardiovascular conditioning—you can see very, very quick results. **PAGE 7**

## Little Things Make A Big Difference...

It's been very encouraging to see how little changes, like raising your computer monitor height, can significantly reduce the risk for MSDs, like chronic headaches. It's the simple things that matter, such as educating employees to watch their sitting posture so they'll avoid knee pain—or teaching them how to use the proper-sized mouse and grip with their whole hand instead of just the fingertips (awkward pinch grip) to help them avoid Blackberry thumb, wrist tendonitis, and other MSDs. **PAGE 7**




### **DH: Are there potential liabilities for employers introducing desk exercise or other movement priorities at work?**

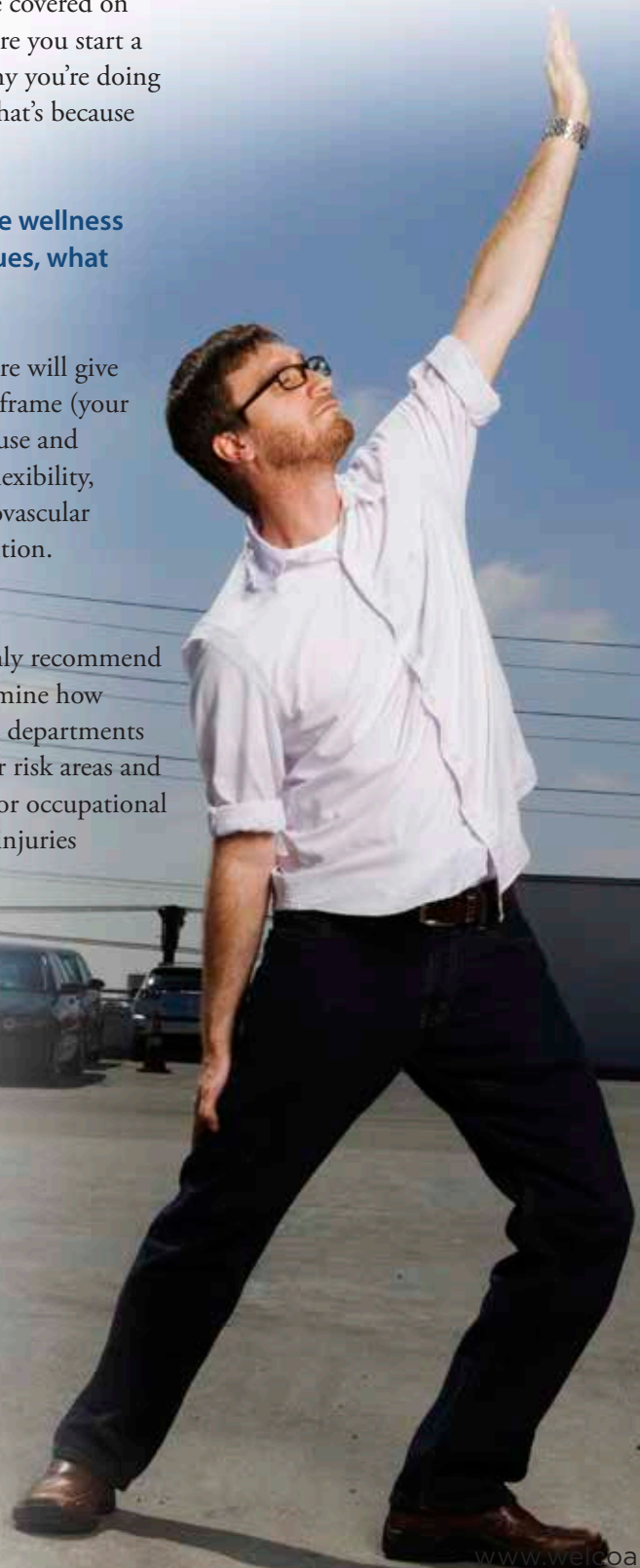
**EN:** It's unfortunate, but we are a highly litigious society. I always recommend consulting with your company's legal team or to get some legal advice. Make sure you have the proper consent forms signed before you implement any stretching or strengthening programs so that if somebody does get hurt, you're covered on the legal end. I also think it's very important to educate people before you start a stretching or ergonomics program. Make sure you communicate why you're doing it—and the benefits of stretching or strengthening exercises—and that's because you value your employees and their health.

### **DH: If you could give two or three pieces of advice to worksite wellness practitioners regarding ergonomics and musculoskeletal issues, what would you tell them?**

**EN:** A quote by Thomas Edison says it best: "The doctor of the future will give no medicine, but will interest his patients in the care of the human frame (your body), in diet (healthy nutrition and drinking water), and in the cause and prevention of disease." Healthy lifestyle habits of daily *WorkSmart* flexibility, strength or circuit training 2-3 or more times each week, and cardiovascular exercise for 30 or more minutes daily, are very important for prevention. We must move it, or we lose it!

In regards to ergonomics and MSD injury prevention, I would highly recommend looking at your OSHA log history for the past 3 to 5 years to determine how employees are getting hurt, what body parts are affected, and which departments or shifts may be at higher risk. Pay particular attention to the higher risk areas and have an ergonomic work-risk analysis performed by a physical and/or occupational therapist. Then, implement policies that help counteract the MSD injuries common in those areas.

Lastly, provide environmental support such as walking paths, healthier dining options and stretch breaks. This will drive employees to make wiser choices towards improving their lifestyles—and therefore, their musculoskeletal health. Employers must help to create a culture where the healthy choice is the easy choice, and give employees an environment in which they can succeed. 





17002 Marcy Street, Suite 140 | Omaha, NE 68118  
402.827.3590 | [welcoa.org](http://welcoa.org)