# Ergonomic Breaks, Rest Periods, and Stretches Meeting Kit

## What's At Stake

Ergonomic breaks help to increase worker productivity and reduce the occurrence of injuries. Think of yourself as an "athlete." An athlete wouldn't participate in a sport without proper rest and warm-up. Use the same preparation on the job.

## What's the Danger

#### **ERGONOMIC CONCERNS**

It is important to remember that it is not necessarily the weight of the load that causes the injuries, but rather the frequency and duration of handling. If the load is heavy, the frequency and duration of the lift will have to decrease.

Overexertion and cumulative trauma were the biggest factors in these injuries. Bending, followed by twisting and turning, were the more commonly cited movements that caused back injuries. Strains and sprains from lifting loads improperly or from carrying loads that are either too large or too heavy are common hazards associated with manually moving materials.

Work-related disorders aren't just limited to heavy manufacturing or construction. They can occur in all types of industries and work environments, including office spaces. Research shows that repetitive motion, poor posture, and staying in the same position can cause or worsen musculoskeletal disorders.

Staying in one position while doing repetitive motions is typical of a desk job. An analysis of job industry trends over the past 50 years revealed that at least 8 in 10 American workers are desk potatoes.

#### WHAT IS A MUSCULOSKELETAL DISORDER (MSD)?

Work-related musculoskeletal disorders are a group of painful disorders of muscles, tendons, and nerves. These injuries are preventable with a work-readiness program that includes stretching.

Heavy lifting, pushing, pulling, or repetitive motion can cost employers billions of dollars on an annual basis. Injuries resulting from these motions are common and costly. To reduce the risk and promote a healthy, safe work environment, make sure your employees are physically ready for work. Developing and implementing a stretching program can reduce employee injuries and save money.

#### COMMON MUSCULOSKELETAL DISORDERS

**Carpal Tunnel Syndrome.** Carpal Tunnel Syndrome impacts the hand due to pressure on the median nerve which controls movement and feeling in the thumb and fingers.

**Tendinitis.** When the thick fibrous cords that attach muscle to bone are inflamed or irritated, tendinitis can occur.

**Muscle Strain.** This common type of MSD happens when the muscle is overstretched or torn.

**Ligament Sprain.** A ligament sprain involves the overstretching or tearing of the ligaments, which are the fibrous connective tissues that connect bones to each other for stabilization.

#### **CAUSES OF MSDs**

- Exerting excessive force.
- Excessive repetition of movements that can irritate tendons and increase pressure on nerves.
- Awkward postures, or unsupported positions that stretch physical limits, can compress nerves and irritate tendons.
- Static postures, or positions that a worker must hold for long periods of time, can restrict blood flow and damage muscles.

- Motion, such as increased speed or acceleration when bending and twisting, can increase the amount of force exerted on the body.
- Compression, from grasping sharp edges like tool handles, can concentrate force on small areas of the body, reduce blood flow, nerve transmission and damage tendon sheaths.
- Inadequate recovery time due to overtime, lack of breaks and failure to vary tasks, leave inadequate time for tissue healing.
- •MSDs can affect nearly all tissue in the body: nerves, tendons, tendon sheaths and muscles. The most frequently affected areas of the body are arms and the back.

## **HOW TO PROTECT YOURSELF**

#### RECOMMENDED STRETCHES WHILE AT WORK

Stretches can help you warm up before work and relax during breaks; they increase flexibility and boost blood flow and oxygen to muscles. Perform stretches slowly and gently, avoid extreme postures, and stop stretching if you feel pain or discomfort. Physical and occupational therapists are the most qualified individuals to generate a specific stretching and warm-up program.

#### STRETCHING AT WORK - THE BENEFITS

**Reduces Fatigue.** Stretching at work can reduce fatigue by increasing blood supply and nutrients to your muscles.

Can Prevent Muscle Strain Injuries. Stretching is waking up your muscles to let them know that they will be performing a job. Stretching warms up the muscles by working them gently — just like an athlete. Athletes always stretch out before practices and games to warm up their muscles. Why do they do that? So they perform better.

**Improves Posture.** Stretching can improve posture by allowing muscle tissues to realign, thus reducing effort to achieve and maintain good posture. Often these muscles have adapted poorly to effects of gravity and poor postural habits.

Increases Muscle Coordination and Balance. Stretching also helps opposing muscle groups work in a more coordinated fashion.

#### OTHER STEPS - REST BREAKS/ALTERNATE WORK ACTIVITIES

**Rest breaks** are crucial, and give you a chance to recover. Take micro-breaks lasting 20 seconds every 20 minutes and take minibreaks lasting three-to-five minutes, at least every hour. These short breaks help give your body a rest, reduce discomfort, and improve your performance.

Alternate your work activities and postures throughout the day—rotating tasks may seem inefficient, but the use of different muscle groups increases energy and maintains productivity. For example, if you work at a single workstation, move into different postures while you work. If possible, alternate between standing and sitting. When standing, it helps to shift body weight from one leg to another by using a footrest or built-in foot rail. If at a sitting workstation, stand up when taking micro-breaks. During mini-breaks, take a short walk from your workstation.

### FINAL WORD

"Manual handling" means using your body to exert force to handle, support or restrain any object, and includes not only lifting and carrying but also repetitive tasks. A manual handling task that has the potential to cause injury is a "hazardous manual handling task".