

# Preventing Strains and Sprains Meeting Kit

## What's At Stake

Many strains and sprains occur because of poor material handling. Injuries can occur when workers try to pull or lift a heavy or awkward object without help or lift an object while twisting from the waist. Workers lift things that weigh too much, or they lift incorrectly.

### **SPRAINS AND STRAINS DISTINGUISHED**

**A sprain is an injury to a ligament (tissue that connects two or more bones at a joint).** In a sprain, one or more ligaments is stretched or torn. A strain is an injury to a muscle or a tendon (tissue that connects muscle to bone). In a strain, a muscle or tendon is stretched or torn.

## What's the Danger

### **COMMON CAUSES OF STRAINS AND SPRAINS**

**Lifting, pushing, and overreaching are common causes of strains and sprains.** Any job that requires you to sit or stand bent in an awkward position for long periods of time can cause excess stress and strain on muscles. Most strains and sprains affect the back, arms, and shoulders.

**Many strains and sprains occur because of poor material handling.** Workers lift things that weigh too much, or they lift incorrectly. Lift correctly by bending your knees, not your back. Carry loads close to your body. Injuries can occur when workers try to pull or lift a heavy or awkward object without help or lift an object.

**Get help with heavy loads.** Don't try to move or lift an object you can't handle. Instead of lifting a 75-pound load, break it down

into smaller parts. If you can't break it down, get help from a mechanical device or lift it with another worker. Make sure moving equipment works properly or it will cause you to strain unnecessarily.

**Change your working positions frequently.** Chronic strain due to an unchanging work position can weaken your back, arms, and shoulders. Adjust working heights to prevent slumping or excessive reaching. A vicious cycle develops when chronic strain continues; muscles become less able to withstand strenuous activity and grow more prone to injury of all kinds. Stretch during the day to increase your flexibility. Take body relaxation breaks by letting your shoulders and neck muscles go limp; swivel your head or arms or flex your hands and fingers.

## **HOW TO PROTECT YOURSELF**

### **A PROACTIVE, PREVENTION-FOCUSED APPROACH TO SPRAINS AND STRAINS IN THE WORKPLACE**

There are two primary types of controls; ergonomic (workplace) controls to reduce/remove ergonomic risk factors and individual controls to reduce/remove individual risk factors.

#### **Ergonomic (Workplace) Controls**

- Engineering Controls eliminate or reduce awkward postures with ergonomic modifications that seek to maintain joint range of motion to accomplish work tasks within the mid-range of motion positions for vulnerable joints. Proper ergonomic tools should be utilized that allow workers to maintain optimal joint positions.
- Administrative Controls include work practice controls, job rotation and counteractive stretch breaks.

#### **Individual Controls – Risk Factors**

- Education and Training Process: Employees should be trained on all aspects of human performance, including ergonomics, and individual health and wellness. Formal classroom

training and one-on-one follow up ensures the message is getting through.

- **Early Intervention Process:** The early warning signs of future injuries are present in your workforce today. Early intervention is a proactive strategy designed to discover early warning signs of MSDs and prevent the early warning signs from developing into an injury. These one-on-one consultations with individual workers are often the last line of defense between risk factors present and an injury.

## **PRECAUTIONS TO LOWER RISK OF SPRAINS AND STRAINS AT WORK**

- **Practice healthy habits**—Be sure to take care of your body by eating a balanced diet, getting regular exercise, drinking plenty of water and keeping a proper sleep schedule.
- **Stretch it out**—Tightened muscles are increasingly vulnerable to strain injuries. Try to loosen up before your work shift with some light exercise, followed by a full body stretch session.
- **Follow workplace protocols**—Be sure to follow all workplace health and safety protocols regarding ergonomics, body mechanics, machine usage and lifting techniques to help minimise your risk of injury.
- **Know the signs**—One can detect the injury sooner and make necessary workplace adjustments before it becomes a serious concern. Common signs of a sprain and strain injury include excessive fatigue, discomfort, swelling, tenderness, and limited range of motion.

## **PROFESSIONAL PREVENTION FOR PROFESSIONAL (INDUSTRIAL) ATHLETES – THINK OUTSIDE THE BOX**

In the sports world, professional athletes are treated with utmost care. Team owners provide their athletes with injury prevention professionals, otherwise known as Certified Athletic Trainers (ATCs). The job of the athletic trainer is to keep the team healthy and performing at their best. After all, the success of the team depends on the health and performance of the athletes on the team.

Sprains and strain are common injuries in athletics, and athletic trainers are specifically trained in prevention of soft tissue injuries of all kinds. Bringing an athletic trainer into the workplace to prevent soft tissue injuries is a natural extension of their skillset.

Think outside the box – what if your employees got the same treatment and care as professional athletes? What if an on-site prevention professional worked side-by-side with your employees, keeping them healthy?

## **KEY TAKEAWAYS**

- Sprains and strains in the workplace (and at home) are common and costly.
- Sprains and strains are caused by exposure to risk factors; ergonomic (workplace) risk factors and individual risk factors.
- Preventing sprains and strains in the workplace requires a simple strategy – reduce all causative risk factors by implementing controls, both ergonomic and individual controls.
- Fostering a culture of prevention at your facility is the best way to achieve prevention excellence.
- Certified Athletic Trainers are professional prevention specialists – engaging a prevention specialist at your facility can accelerate health and safety excellence.

## **FINAL WORD**

It's time to think "outside the box". (ATCs) have more than proven themselves as the most competent body of work to treat soft tissue injuries in billion-dollar industries in Hockey, Football, Baseball, Basketball, and others.