# What has been completed to date in terms of Sprains, Strains and Tears Campaign:

- Articles in SafetyNet
  - October, 2015 teaser about November feature article on SST;
  - November, 2015 feature article Recognizing and Preventing Sprains and Strains;
  - o December, 2015 teaser about January feature article on Slips, Trips, and Falls;
  - January, 2016 feature article Slips, Trips, and Falls And How to Prevent Them This Winter Season;
  - o February, 2016 teaser for March feature article on Overexertion;
  - o February, 2016 short article on International RSI Awareness Day;
  - o February, 2016 short article alerting to Slip, Trip, and Fall Hazard Alert;
  - March, 2016 feature article Overexertion, The Leading Cause of Sprain and Strain Injuries.
- Week-long social media campaign to coincide with Repetitive Strain Injury Awareness Week
- Radio slips, trips, and falls commercial
- Social media slips, trips, and falls (linked to Safety Bulletin)
- Ongoing social media often touched on as part of our monthly statistics features
- NAOSH Week Slips, Trips, and Falls was one of the topics covered by the coffee breaks

Given the relationship between overexertion and sprains, strains and tears, we wanted to change the focus to overexertion and educate employers and workers in the health care field. Similar to the sprains, strains and tears campaign, the following will be developed:

- Fact sheets to specific industries including health care and carpenters;
- SafetyNet articles;
- Social media on overexertion; and
- NAOASH week

## Overexertion:

What is Overexertion: Overexertion is when a group of muscles or tendons can be over exerted. This can happen when a worker performs excessive exertion or is engaged in a repetitive action for a prolonged period of time. In other words, the individual works beyond their physical capacity and the physical forces required to perform a task exceed the tolerances of the body's soft tissues. Factors such as poor physical health, smoking, obesity, aging and being less flexible will impact an individual's tolerances.

For workers who perform laborious tasks, the most common on-the-job injuries are strains and sprains caused by overexertion or awkward positions. In the health care field, this can be due to improper transfers and frequent and heavy lifting.

# **Statistics**

What do WSCC statistics tell us about overexertion claims:

- Out of the top 10 compensation costs, the most compensation benefits were paid to carpenters and nurse aids. Number 5 in the top 10 were registered nurses;
- Looking at stats from January 2014 to July 2016, registered nurses and nurses aids were paid a total of 954 days of compensation; for the same period of time, carpenters were paid 1,425 days of compensation;
- A total of \$269,105.96 in compensation benefits were paid to carpenters; and
- A total of \$344,185.93 was paid to nurses aids and registered nurses in timeloss benefits.

#### Causes:

- Lifting items that are too heavy or too bulky, or using improper lifting techniques (ergonomics)
- Repeated bending at the waist with twisting
- Long-term bending at the waist
- Pushing/pulling
- Carrying
- Reaching
- Long-term poor posture (either sitting or standing)
- Sitting while absorbing vibration through the body (truck drivers)
- Lowering

Essentially, overexertion occurs when the load exceeds the limits of the human joint system doing the work or through repetitive work without sufficient rest or proper technique.

## **Symptoms:**

- Fatigue
- Nausea/Vomiting
- Fainting
- Acute Pain

## Types of Injuries / Musculoskeletal Disorders:

- Carpal Tunnel Syndrome
- Trigger Finger
- Tennis Elbow
- Lower back disorders
- Thoracic outlet syndrome
- Strains
- Sprains

## **Affected Body Parts Include:**

- Muscles
- Tendons
- Bones
- Ligaments
- Blood Vessels
- Nerves
- Cartilage

#### **Risk Factors:**

- Environmental: Risks that are in the work environment
- Individual: Risks that are unique to the Individual
- Equipment: Risks that are in the equipment
- Work Practices: Risks that are caused by work processes, procedures or requirements
- Ergonomic Hazards: Workplace or task not properly designed for human activity

## **Environmental Risk Factors include:**

- Work space design
- Heat/cold
- Noise
- Humidity
- Pollution
- Atmospheric pressure
- Glare

## **Equipment Risk Factors Include:**

- Amount of force required
- Compression or contact stress
- Vibration Tool/Equipment design
- Weight of object
- Grip torque
- Stability
- Poor Design

# **Workplace Risk Factors:**

- Repetition
- Lifting and Carrying
- Twisting and Turning
- Bending
- Stretching

- Kneeling
- Reaching
- Quick Motion
- Pushing/pulling
- Carrying
- Static work
- Improper sitting

#### **Individual Risk Factors:**

- Male versus female
- Weight and height
- Strength
- Age
- Posture
- Health and fitness
- Fatigue
- Stress
- Pregnancy

## Impacts on employers:

- loss of productivity
- training
- increased claims costs

# **Prevention Efforts:**

# **Training & Ergonomics:**

- Education on safe lifting (WSCC fact sheets geared towards specific industries including health care and construction, paying close attention to carpenters)
- Stretch and/or warm up before heavy lifting or strenuous activity
- Lift with your legs bent and hold objects close to your body
- Avoid bending, reaching, and twisting when lifting
- Ask a friend for help when lifting
- "No-lift Policies" hire outside help with lifting tasks that are considered to be riskier or use lifting machines, standing machines, adjustable chairs or mechanical chairs to do the work for you.

## **Program Development:**

• Develop a formal, structured, and written ergonomics program.

- Implement a "stretch and flex" program which can be completed during daily safety toolbox talks.
- Wellness programs promoting healthy lifestyle:
  - One way in which to prevent strains and sprains caused by overexertion is to improve the overall fitness of employees. This can be accomplished via health and wellness programs.
  - Promote healthy relationships between supervisors, management and workers. In workplaces where the relationship between supervisors and staff are unhealthy, workers may become dissatisfied with their work, which will impact their overall sense of wellbeing and can contribute to overall injury rates.
  - According to a document entitled "Review of Workplace Wellness Program Options to Reduce Musculoskeletal Disorders in Laborious Work," it was found that employers can expect a 300% to 600% return on investment in properly developed and administered wellness programs.