Strains and Sprains: the most costly injuries in trucking

Strains and sprains are the most costly injuries in trucking. They can be caused by repetitive use without adequate rest, lifting heavy or awkward objects or boxes, awkward postures such as reaching overhead for long periods of time, and gripping something tightly.

The injuries
Work-related strains and sprains are injuries to muscles, tendons, and nerves that are referred to by doctors and researchers as musculoskeletal disorders or MSDs. Strains and sprains can have many causes and each additional risk factor increases the likelihood of injury.

Risk factors for muscles, tendons, and nerves include:
- Repetitive use without adequate rest
- Lifting heavy or awkward objects or boxes
- Awkward postures such as reaching overhead for long periods of time
- Gripping something tightly

Work-related strains and sprains include:
- Back pain
- Shoulder pain
- Muscle strain
- Tendonitis

Workers’ compensation costs
Work-related strains and sprains are the most costly and most frequent injuries in the trucking industry.

- 41% of compensable claims are the result of strains and sprains to the neck, back, and upper extremity (shoulders, elbows, hands/wrists)
- The average cost for a claim is over $26,000
- Average of 184 time-loss days

Compared to other industries
Couriers have almost four times the rate of work-related strains and sprains claims of all industries combined. Waste Collection has three and a half times the rate and General Freight trucking is close with almost two and a half times the rate of work-related strains and sprains of all other industries combined.

Additional costs
Work-related strains and sprains also increase the cost of hiring and training, increase turnover, and decrease productivity. Sometimes workers are unable to return to their full wage jobs after such an injury or require extensive life-altering surgeries or treatments to recover.

1. This issue of TIRESpin is focusing on strains and sprains of the neck, back, and upper extremities. Because strains and sprains of the lower extremities occur less frequently, they are not addressed here.

2. WA workers’ compensation data 1997-2004
3. WA workers’ compensation data 1996-2004
Safety Programs Work!

Having a program to prevent work-related strains and sprains makes good business sense. Among the many positive outcomes of a strain and sprain prevention program are:

- Healthy workers, who are free from pain and more efficient
- Reduced lost-time from an injury claim
- More likely to keep experienced, knowledgeable workers
- Improved employee satisfaction, morale and well being

Low-cost and simple solutions do exist that can help reduce the number of strain and sprain injuries in your company. Hundreds of companies have shown that investments in injury reduction are paid back in less than a year. Here are several steps that can be followed to tackle these injuries:

**Step 1: Evaluate the Problem**
- Look at past injuries and determine where the most common and most serious strain and sprain injuries are occurring. Compare the types of injuries — are more of the injuries in the back, shoulder or hands/wrists?
- Evaluate jobs to identify the most demanding tasks. Highlight the tasks requiring the most frequent and extreme amount of demand, and those in jobs where injuries have been occurring.
- Talk with workers and supervisors about the parts of jobs they feel are the most physically demanding and most likely to cause a strain or sprain.

**Step 2: Prioritize the Risks**
Rank the identified tasks based on the following:
1. History of injuries
2. Amount of physical effort
3. Number of workers
4. Identification by workers and supervisors

**Step 3: Develop Solutions**
- Brainstorm ideas to reduce the stress in tasks in order of priority. Involve workers and supervisors in brainstorming and initially don’t rule out any option. All ideas can lead to solutions.
- Develop solutions for the top tasks, focusing first on those that can be done quickly and at low cost. Use the creativity of people in your company.
— many things can be made in-house, whether it is fabricated or made of foam and duct tape.

- Investigate longer-term, more expensive solutions that need an investment of capital. These ideas can often produce large gains in both productivity as well as reduction in injuries. Again focus on the

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ideas that have the largest potential to reduce the most injuries and improve the work process.

**Step 4: Implement Solutions**

- Quickly implement the easiest and lowest-cost ideas — it is important to show that some action is being taken.

- Work with the people affected to implement changes; sometimes it takes a couple of trials to get it right. Involving the people who do the work will make it more likely they will adopt the changes.

- Ask vendors to let you test equipment or products on a trial basis. Evaluate with the workers whether the equipment or products improve or reduce productivity.

**Step 5: Evaluate and Improve**

- Improving your company's safety process is an ongoing activity. Evaluate whether the changes have worked. If so, can they be further improved or expanded to other operations?

- Once the biggest problems are addressed, keep working down the list of priorities.

- Evaluate the jobs again. Has anything gotten better or worse, are there new operations that need improvement? Document and quantify the changes in terms of dollars and reduction in risk to demonstrate effectiveness to management.

These are the basic steps to address strain and sprain injuries in your company. The strategies can vary and should be tailored to what works best for you. The TIRES Project staff in the SHARP Program are available to help you work on these issues. Additionally, your industry association or third-party administrator may be able to provide resources and ideas.
Total Cost of State Fund Compensable Claims in Washington State Trucking, 1997-2004

Strains and sprains are the most costly injuries in the trucking industry. The most common body part injured is the back.

* Strains and sprains of the neck, back and upper extremities.
** All others includes strains of the lower extremities.

What do you think?

What object below is the cause of the most strain and sprain injuries in the trucking industry?

A) Boxes/Cartons
B) Garbage cans
C) Chainsaws
D) Live animals

Although all have caused at least one strain or sprain injury in trucking, the correct answer is A) Boxes/Cartons. According to Washington State Workers’ Compensation data, from 1997-2004, the source of 2,780 strain and sprain injuries was boxes or cartons.

These injuries do not have to happen. To prevent them:

• Don’t ignore pain — report symptoms early
• Use mechanical aids to move heavy loads.
• Don’t force it — get help if it’s too heavy or too hard