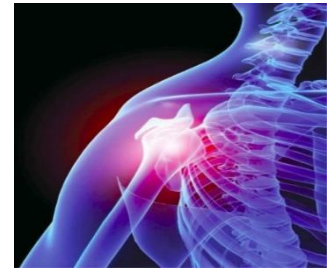
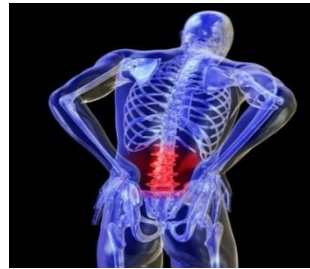


The *BSO Plus Safety Topic* is a review designed from the BSO Plus agenda. This safety topic is your way to stay current on the safety information over the 3 years between BSO Plus and BSR.

ERGONOMICS

What is it?

Ergonomics is the study of the kind of work you do, the environment you work in, and the tools you use to do your job. More specifically, it is the science of designing equipment and devices to fit the work to the worker; this means designing and arranging work so that the work is in harmony with the natural movements of the human body.



Why is it important?

Every day we use our muscles, tendons, ligaments and joints to lift, carry, sit, stand, walk, move and work. Sometimes the way we do these tasks can put too much strain on our bodies, causing pain and discomfort. This extra demand may also lead to more serious injuries called musculoskeletal disorders (MSD's). MSD's are injuries and disorders that affect muscles, tendons, ligaments, joints, nerves, and/or blood vessels. Examples of MSD injuries include: herniated disc, muscle sprains & strains, tendonitis, carpal tunnel syndrome, bursitis and tennis elbow.

Over the past 10 years, Sprains and Strains have consistently represented the leading nature of injury according the Workplace Safety and Insurance Board (WSIB), ranging from 39% to 44% of all allowed lost time claims between 2014-2017.






Source: "Schedule 1 highlights 2017" <http://www.wsibstatistics.ca/>

How are you exposed to ergonomic hazards?

Injuries can develop when the same muscles are used repetitively, or for a long time without adequate rest. This type of injury increases if the force exerted is high and/or the job requires awkward posture. Ergonomic hazards are a result of poor work design, which includes any of the following elements:

- Work station
- Tools and equipment
- Physical environment
- Organization of work

POSTURE 	REPETITION 	FORCE 
<p>The farther a joint moves towards either end of its range of motion, or the farther away from the neutral posture, the more awkward the posture becomes and the more strain is put on the muscles, tendons and ligaments around the joint.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • Long periods of time to complete a task • Standing for a duration • Sitting for a duration • Fatigue 	<p>The risk of developing an MSD increases when the same parts of the body are used repeatedly, with few breaks or chances to rest.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • Repeated use of a tool or movement • Completing an action in an awkward position • Using more force while completing an action 	<p>When a task requires muscles to exert a level of force that is too high for any particular muscle, it can damage the muscle or the related tendons, joints and other soft tissue.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • Lifting • Lowering • Carrying • Pushing or pulling • Gripping or manipulating objects

Hazard Management for Ergonomic Hazards

The effective management of ergonomics can help you be more comfortable at work. It can help lower stress and injury caused by awkward positions and repetitive tasks. When identifying and correcting ergonomic hazards in the workplace, it is important to include **both** the worker and management in the process. Often, the person with the most knowledge about the details of a job is the person doing it.

In order to effectively manage ergonomic hazards, they must first be identified, then assessed, and finally controlled.

