



Instructor Guide

Musculoskeletal Injuries (MSIs)

Topic Overview (why the topic is important to the students)

Auto mechanics perform many tasks, such as lifting heavy objects, working in uncomfortable postures for extended periods, and repeating the same movements. These tasks can put strain on the body and can result in musculoskeletal injuries (MSIs). MSIs are injuries or disorders of the muscles, tendons, ligaments, joints, nerves, or blood vessels. Some common MSIs include muscle or tendon strains, ligament sprains, and tendonitis. MSIs account for about one-third of the claims accepted by WorkSafeBC.

Signs and symptoms of MSIs include redness, swelling, numbness, tingling, pain, and difficulty moving a particular body part. Signs and symptoms may appear suddenly, or they may develop over a long period of time. Employers are required to identify risks of MSIs and to control or eliminate them where possible.

Demonstration and Discussion Topics

- **Discuss** the hazards or tasks in the shop that may produce MSIs.
- **Tour the shop** with the students, and point out the hazards.
- **Distribute** the student handout.
- **Review** the safety tips.
- **Explain** what can be done in the workplace to minimize the risk of MSIs (e.g., arrange workspace, change tasks).
- **Make it real.** Tell at least two stories of injuries from your experience, or use the following examples:
 - A young worker suffered severe back pain after working overhead on a vehicle on a hoist. He was diagnosed with back strain requiring medication and physiotherapy.
 - A mechanic had pain, tenderness and swelling in his wrists after repeated use of a wrench to loosen frozen bolts. His condition progressed to a point where he could no longer hold hand tools without dropping them. He was diagnosed with carpal tunnel syndrome.
- **Discuss** the attitude that “it won’t happen to me”. Remind students that an injury can and will happen if they take shortcuts or are careless.
- **Educate** students to be able to identify and report any safety concerns about MSI hazards.
- **Answer** any questions or concerns students have.
- **Set a good example** by working safely at all times.

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Resources

- Understanding MSIs – educational guide for workers
http://www.worksafebc.com/publications/health_and_safety/by_topic/assets/pdf/msi_workers.pdf
- Does your back hurt?
http://www.worksafebc.com/publications/health_and_safety/by_topic/assets/pdf/does_your_back_hurt.pdf