Muskuloskeletal disorders. They sound trifling compared to terminal cancers caused by toxic chemicals, or crippling incidents that put workers in wheelchairs for life. Few Canadians even know what they are. In real life, however, musculoskeletal disorders (MSDs) can be devastating, as this example illustrates:

- An assembly line worker tries dulling the pain of an agonizing repetitive strain injury with prescription drugs. He knows if he complains, he will be taken off the job. Despite two surgeries, the swelling in his arm has never subsided.

An extreme case? Perhaps, but a shocking reality is one in 10 Canadian adults experiences a musculoskeletal disorder serious enough to limit basic movements the rest of us take for granted.

Most of the 2.3 million Canadians experiencing MSDs – also known as repetitive strain injuries (RSIs) or musculoskeletal injuries (MSIs) – are hurt at work.

The economic costs are also huge, estimated at $26 billion annually. Most MSD-related costs aren’t covered by employers operating unsafe workplaces, but by Canadian taxpayers.

Despite a golden opportunity to prevent injuries to hundreds of thousands of Canadian workers, most governments have not yet taken decisive action on MSDs.

Musculoskeletal disorders and repetitive strain injuries are terms to describe a collection of injuries, such as carpal tunnel syndrome and tendinitis, that mainly affect muscles, nerves and tendons. Symptoms include aches, pains, burning, tingling, swelling and loss of joint movement and strength.

Many workplace factors trigger MSDs. Repetition, rapid work pace, awkward positions, forceful movements, vibration, cold temperatures, occupational stress and too little recovery time from hard physical labor are the main culprits.
There are two solutions to Canada’s epidemic of musculoskeletal injuries, and both focus on prevention. The first is government regulation coupled with effective enforcement. The second is ergonomics, the science of designing work and workplaces to fit workers.

One example of ergonomics in action focuses on baggage handlers at Toronto’s Pearson International Airport, who for many years suffered high rates of MSDs. Worker representatives on Air Canada’s joint health and safety committee made a business case for ergonomic interventions and, despite worries about decreased productivity, management agreed to a prototype scheme. Follow-up surveys tracked reduced rates of MSDs – and demonstrated productivity gains. This success paved the way for ergonomic improvements both at Air Canada and airport terminals across the country.

Canada’s largest circulation daily newspaper has also benefited from ergonomic improvements. The Toronto Star conducted a six-year joint study that focused on reducing the burden of MSDs on workers at the newspaper. Actions included establishing a joint management-worker repetitive strain injury (RSI) committee, implementing a Stop RSI program which included mandatory RSI training, ergonomic workstation assessments and guidelines for the purchase of new computer equipment. The result? There was a measurable reduction in lost workdays and lost-time injury claims at The Star.

Still, relying on voluntary initiatives and employer ‘general duty clauses’ to protect workers has not stopped widespread suffering from MSDs. Compulsory regulations are clearly necessary. Experience in Europe demonstrates beyond doubt well enforced regulations significantly reduce MSDs. Of all Canadian jurisdictions, British Columbia leads the way, with ergonomic regulations resulting in a 19 per cent drop in MSD occurrence since 1998, and a 40 per cent decrease in costs. Saskatchewan and Manitoba also have regulations in place.

As for Ontario, progress on MSD regulation is occurring, but slowly. In this province, we have released an official provincial guideline and approved three very practical information toolboxes to help observe this guideline. There are several excellent proposals in the documents, which include conducting thorough MSD risk assessments, promoting worker participation at all stages, and training for all ‘workplace parties’, including management, in MSD recognition and prevention.

Meantime, workers themselves have ignited a movement to focus on awareness of MSDs or repetitive strain injuries, their causes and solutions. International RSI Awareness Day features scores of events taking place around the world on the last day of February, including here in Canada.

All of these initiatives need to be supported with sound information and quality training, which is a strong suit of our organization, the Workers Health & Safety Centre. Many of our services and at least three of our courses specifically tackle these issues:

- Ergonomics: Injuries, Risk Factors and Design Principles;
- Ergonomic Toolbox; and
- Applying Ergonomics to Prevent Musculoskeletal Injuries.

This year the Workers Centre is also once again supporting RSI Awareness Day efforts in Ontario with scheduled training opportunities and information resources in communities across the province.

To learn more visit www.whsc.on.ca or call toll free from anywhere in Ontario 1.888.869.7950.