



Moving a Ton of Snow

How to Safely Shovel Snow Without Injuring Your Spine

Dr. John Zielonka ©2005

Do you remember when you were a kid and you would look outside and say “boy did we ever get a ton of snow”? Well it turns out that you were being far more literal than you thought. If you consider that the average shovel full of wet snow easily weighs 10 pounds and that a driveway could easily be 200 shovels, you have 2,000 pounds or 1 ton. It’s no wonder then that each year so many people injure themselves on what many consider a routine activity. Imagine if you had to move 2,000 pounds of bricks or firewood (in frigid weather I might add) without any warm up or with poor technique.

The injuries I see in my office go far beyond back pain. They also include shoulder problems, neck pain, hip problems and muscle spasm as well as a variety of injuries from those who slip or fall on the ice while shoveling. They also include those who re-aggravate old injuries or exacerbate unknown underlying conditions especially if you have a sedentary lifestyle. To help prevent injury all of the following are recommended.

Prior to going outside

1. **Plan and Assess** – If it’s a large, wet snowfall get help or plan to break it up in segments. Is there supposed to be freezing rain tomorrow or will it be so warm that the snow will melt? If you have a heart condition, remember that a clean driveway is never worth dying for.
2. **Warm up** - You wouldn’t (or shouldn’t) do any other activity involving 2,000 pounds without warming up and stretching.
3. **Choose proper attire** – This includes not only layering but also proper treads on your boots to prevent falls.
4. **Have the proper tools** – Shoveling snow and chopping ice require different tools. Ergonomic shovels may be useful provided you use them properly. Just like lifting weights, good equipment will never make up for poor technique.

Good technique

1. **Push.** It is far easier to push a ton of snow than it is to lift a ton of snow. When doing so be sure to keep your spine straight and push with your legs. Lift only when necessary.

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2. **The 3 keys to Lifting** – Shoveling snow is like lifting anything else.
 - a) **Bend your knees** while keeping your spine upright.
 - b) **Keep the load close to you body** (forgetting this defeats the benefits of bending the knees)
 - c) **Remember that your feet do move.** Turn your feet, don't twist.
There is no better way to injure your spine than to load it and twist it as this compresses the spine and puts significant pressure on the spinal nerves and discs. Repeated compression to this area is also likely to result in early degeneration. Use smaller loads when possible (just like lower weights and higher reps in a gym).

Prevention

True prevention goes far beyond good technique. Someone whose spine is in proper alignment and who has good core strength (these are 2 separate issues and each one is essential) will obviously withstand the rigors of snow shoveling and avoid injury far better than someone who has poor spinal alignment or someone who has never maintained their spine. Proper spinal alignment is also essential for proper nervous system function.

1. **Get a spinal exam** – It is amazing how everyone understands that they should have regular dental and eye exams yet they have never had a spinal exam. It should therefore come as no surprise that 80% of the population suffers back pain at some point in their lives. Chiropractors are doctors who specialize in the spine and nervous system and can detect and correct any underlying spinal misalignment long before you may feel anything.
2. **Should an injury occur seek professional help** – Again Chiropractors are your best bet as most injuries involve spinal joints and nerves as the underlying cause with the muscles then reacting. Be careful not to mistake the symptom of muscle spasm as the sole problem. Sharp pain, numbness or inflammation is rarely just a muscle problem. Simple muscle fatigue may also be benefited by massage therapy.
3. **Develop good core strength.** – This will also reduce the risk of injury but must be paired with proper spinal alignment for optimum function as many of the best athletes in the world will tell you. Attempting to strengthen vertebrae in a misaligned position may actually lead to injury.

Snow shoveling can actually be an enjoyable form of winter activity and exercise provided the above precautions are adhered to. Should it be a rather excessive snowfall don't forget that a cool down period will also be of benefit. For more information please contact your family Chiropractor or visit us at www.excellenceinhealth.com.

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