



Snow Shoveling

- There are several concerns and cautions that you need to be aware of before considering snow shoveling.
- Snow shoveling can be quite dangerous. Evidence includes a significant increase in heart attacks and deaths in the emergency department following a heavy snowstorm, almost entirely as a result of snow shoveling.
- Snow shoveling is a very intense exercise. It can be equivalent to running a mile in 7 to 12 minutes (5 to 8.5 miles/hour), depending on the weight of the snow, how fast or hard you go at it and the size of the shovel.
- It is also done in the cold which can increase the workload on the heart and constrict coronary arteries which can lead to angina.
- The most dangerous element, however, is the isometric nature of the activity (holding a muscle contraction). Snow shoveling involves repeated isometric arm contractions, typically accompanied by holding your breath (also known as the Valsalva maneuver). The Valsalva maneuver causes increased pressure in the chest cavity which decreases blood flow back to the heart and increases the workload on the heart. This can also lead to angina.

Tips for snow shoveling include:

- Push the snow. Push with the handle against your hip rather than lift with the scoop.
Use your legs to do the lifting/pushing work.
Use a smaller shovel.
Breathe! Don't hold your breath.
- A word about snow blowers...
They are easier to use if they are motorized and self-propelled.
Caution is still required, however, as they do take work to push/pull and turn.
- ECG monitoring during snow blowing demonstrated the highest heart rate and number of skipped beats was actually with starting the snow blower using a pull cord. It is therefore recommended that you spend money on a good tune up each year and take breaks in between attempts to start it up. Better yet, get one with an electric starter.

Talk to your Exercise Therapist if you are considering shoveling snow at your house this winter!