

# Shoveling Snow

## Information from Vermont AgrAbility Project



Snow shoveling is one of the most high-intensity exercises you can do. You are using all your major muscle groups. If you load a shovel (2 plus pounds) with 10 pounds of snow every 5 seconds, you move a load of over 140 pounds per minute. In 15 minutes' time, you will have moved a load of more than one ton. Such effort is obviously not for everyone. Heart attacks, back strain and injury as well as muscle soreness can all be by-products of snow shoveling. Shoveling snow can be made even more difficult by the weather. Cold weather makes it harder to work and breathe, which adds more strain to the body.

Those at most risk for a heart attack should talk to their doctor before going out and shoveling snow. Those most at risk for a heart attack include:

- Anyone who has already had a heart attack
- Anyone with a history of heart disease.
- Anyone with high blood pressure or high cholesterol levels
- Smokers
- Diabetics

Dress for the weather. Wear several layers of warm, lightweight clothing that is comfortable to move in. The inner layer should be thermal underwear that allows perspiration to escape from the skin surface. Make sure your head, including your ears, feet and hands are well covered. Do not let your hat or scarf block your vision. Boots should be waterproof, provide ankle support and provide good traction. Gloves should be light and flexible to give you a good grip.

Back strains are the most common injuries resulting from snow shoveling. Warm up your muscles before shoveling by walking for a few minutes or marching in place. Stretch the muscles in your arms, shoulders, legs, stomach and back; warm muscles will work more efficiently and are less likely to be injured. Begin shoveling slowly to avoid placing a sudden demand on your heart. Pace yourself and take breaks as needed.

Technique is very important for preventing back strain and injury. Stand with your feet about hip-width apart for balance and keep the shovel close to your body. When you grip the shovel, make sure your hands are at least 12 inches apart. By creating distance between your hands, you increase your leverage and reduce the strain on your body. Push the snow rather than lift it. Save your back and your energy by simply pushing the snow to the side. If you must lift, bend your knees and keep your back as straight as possible so that the lifting comes from your leg muscles, not your back. Tighten your stomach muscles as you lift. If you must throw the snow, take only as much snow as you can easily lift, reposition your feet to face the direction the snow will be going and step in the direction you throw the snow.

Follow the tips on the back:



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## Be Safe While Shoveling Snow

**If you have any of the risk factors** (heart disease, high cholesterol, high blood pressure, diabetes, smoker) or are used to a sedentary lifestyle, check with your doctor before shoveling snow.

**Avoid caffeine or nicotine** before beginning. These are stimulants, which can increase your heart rate and cause your blood vessels to constrict. This places extra stress on the heart.

**Drink plenty of water.** Dehydration is just as big an issue in the cold winter months as it is in the summer.

**Stretch!** Treat this chore like any other workout and warm up your muscles. Warm muscles work more efficiently and are less likely to be injured.

**Dress for the weather**, in layers. Bundling up keeps muscles warm and less vulnerable to strains. Synthetic fibers help wick away perspiration better than natural fibers.

**Pick the right shovel** for the job. A snow shovel should be light-weight and the blade shouldn't be too large. A plastic shovel blade will generally be lighter than a metal one. The handle should be long enough so that you don't have to stoop to shovel. A curved handle allows you to keep your back straighter. The grip should be made of plastic or wood; metal conducts cold to your hands.

**Use good shoveling technique.** Push the snow. Keep the shovel close to your body, with your hands at least 12 inches apart. Squat, using your legs to do the work instead of your back. Avoid twisting movements.

**A dry snow is lighter than a wetter snow.** Take smaller loads with wetter snow.

**Pace yourself.** Shoveling snow is a strenuous activity. You are walking on uneven, often icy surfaces. Take frequent breaks to gently stretch your muscles and drink warm non-alcoholic fluids.

**Listen to your body.** Stop and seek assistance if you feel pain or experience heavy sweating or shortness of breath.

