

# Snow Removal Safety Talk



## WHAT'S AT STAKE?

People who live in Northern climates are used to dealing with the fun and frivolity of snow through sports and outdoor recreational fun. People become acclimated to snow removal whether it is in front of an office building, on a roof, or, on a driveway.

## WHAT'S THE DANGER?

The Occupational Safety and Health Administration (OSHA) urges employers, workers, and general public to be aware of the hazards involved when removing snow from rooftops, in and around commercial/business, public spaces and private property.

Workers who perform these activities (for example, building maintenance workers) may have little experience or training on the **Hazards** of such operations or work.

### Significant Hazards

Workers removing snow face other significant hazards in addition to falls from roofs, including:

- Amputations, eye injuries, and other injuries associated with the use of snowblowers and other mechanized equipment.
- Falls from roof – top snow removal operations resulting in fatalities.
- Collapses or tip-overs when using aerial lifts.
- Entrapment and suffocation under falling snow drifts or snow piles.

### AVOID OTHER HAZARDS

#### Exposure to Cold

**Exposure to cold** can cause injury and illness in workers removing snow. Cold exposure can cause frostbite (freezing in the deep layers of skin and tissue) and hypothermia (drop of body temperature to less than 95°F).

#### Physical exertion

**Physical exertion** during snow removal can also cause injuries and illnesses. Snow removal can be strenuous, particularly because cold weather can be taxing on the body, and can create the potential for exhaustion, dehydration, back injuries, or heart attacks, and can increase the risk of falls.

## **AVOID ELECTRICAL HAZARDS**

Workers may face electrical hazards such as electrocution and electric shock from power lines or snow removal equipment.

- Use extreme caution when working near power lines. Always treat power lines, wires and other conductors as energized, even if they are down or appear to be insulated.
- Maintain a distance of at least 10 feet from any power line, as required by 1910.333(c)(3).
- Make sure that all electrically powered equipment is grounded (third prong on a three-prong plug is not missing) and includes a ground-fault circuit interrupter (GFCI) in the circuit.
- When using snow rakes, use extendable, nonconductive poles and designate workers as monitors to maintain 10 feet from snow rakes to overhead power lines.

## **HOW TO PROTECT YOURSELF**

### **ICE PREVENTION / REMOVAL TIPS**

- Purchase a good shovel. Lightweight plastic or aluminum coating with nonstick finishes will make your job a lot easier. You may be tempted to get a shovel with a large blade – however, that means you'll be pushing more weight and tire out quicker. A pusher is a great tool for lightweight, fluffy snow removal. You'll want to grab these and have them handy before storms hit.
- Use a melter (magnesium chloride garden sprayer within a few hours before the storm hits. It can help melt snow of 2 inches or less, and keep ice from bonding to the surfaces of your plants.
- Although rock salt is affordable and does work with temperatures above 12 degrees F, it's really hard on grass & shrubs, and can start eating away at concrete. If you're willing to spend a little more, consider a magnesium chloride or calcium chloride salt that are still not good for plants, but cause much less damage.
- Sand or kitty litter will help make walkways easier to maneuver through, and prevent slipping.
- Place a drop cloth or tarp over walkways or steps. This will not only protect the ground and steps, but it will create a simple and quick way to remove the snow and prevent ice from forming!

### **Removal Tips**

- If you have shrubs covered in snow or ice, leave them alone. Don't try to remove the snow and ice – let it melt off naturally. Shaking it off could injure the plants.
- If possible, make sure you are shoveling – even when it's still snowing. The more the snow accumulates, the harder time you'll have cleaning it out of the way. If the sun is shining, shovel down so that the concrete is exposed to the sun, to help prevent ice from forming.
- Door locks, steps, windows and walkways can accumulate ice during a storm. To get rid of the ice safely, pour lukewarm water over the area, then remove the runoff right away. Repeat this until the ice is gone. Don't use hot water, as the temperature difference can cause windows to crack, metal to warp and even eventually crack concrete!
- A leaf blower can double as a snow blower for light snow accumulation on your plants, patio, vehicles and walkway.
- Use the kids! Instead of making snow removal from your driveway and walkways a

chore, make it into a game! Have a snowball fight or snowman building contest, where all snow for the activities must come from the walkway and driveway!

## **Body Strain**

Snow removal can be strenuous and can create the potential for exhaustion, dehydration, back injuries or heart attacks. Tips to minimize overexertion for workers include:

- Moving small amounts of snow at a time, especially if snow is wet and heavy.
- Using proper lifting form—keeping the back straight and lifting with the legs.
- Taking frequent breaks and drinking fluids, however, avoiding caffeine or alcohol.

## **PROTECT PEOPLE ON THE GROUND**

Workers standing on the ground must also be protected during snow removal operations.

Employers should mark a safe work zone—keeping people back 10 feet from the point where snow is expected to be blown or fall—and require eye and head protection, especially when removing ice.

Snow removal can be dangerous business, particularly when removing snow and ice from rooftops and other elevated structures.

OSHA's General Duty Clause imposes a duty on employers to protect workers from recognized serious hazards in the workplace, including snow removal from roof and other elevated structures.

## **THE DUTY OF CARE:**

### **Before the work begins, employers should:**

- Plan ahead for safe snow removal from roofs.
- Check the worksite for any hazards.
- Limit when and where workers will be required to go on the roof to remove snow.
- Use snow removal procedures that lower the risk of roof or structure collapse.
- Whenever possible, use engineering controls to clear ice and snow without getting on the roof (use aerial lifts and/or ladders to apply de-icing materials, use snow rakes or drag lines from ground). Engineering controls protect workers from fall hazards covered by snow and ice.
- Require all employees to follow manufacture instructions for using mechanical equipment safely.

### **Employers must also:**

- Train workers to identify fall and electrical hazards.
- Train workers on appropriate protective equipment, fall prevention, and electrical standards.
- Provide fall protection equipment that is in good working order.
- Train workers to use ladders, aerial lifts and protective equipment per manufacture guidelines.
- Have a plan for rescuing a worker caught by a fall protection system.

## **FINAL WORD**

When conversation swirl around dangerous jobsites, construction, oil rigs, chemical plants come to mind very quickly. Snow removal usually is last in a list of dangerous

activities or jobs. But in a cold analysis, snow removal procedures and physical impact on general public and workers has a significant impact. There is much more than "meets the eye" once one investigates the full scope of snow removal domestically, commercially and the health effects.