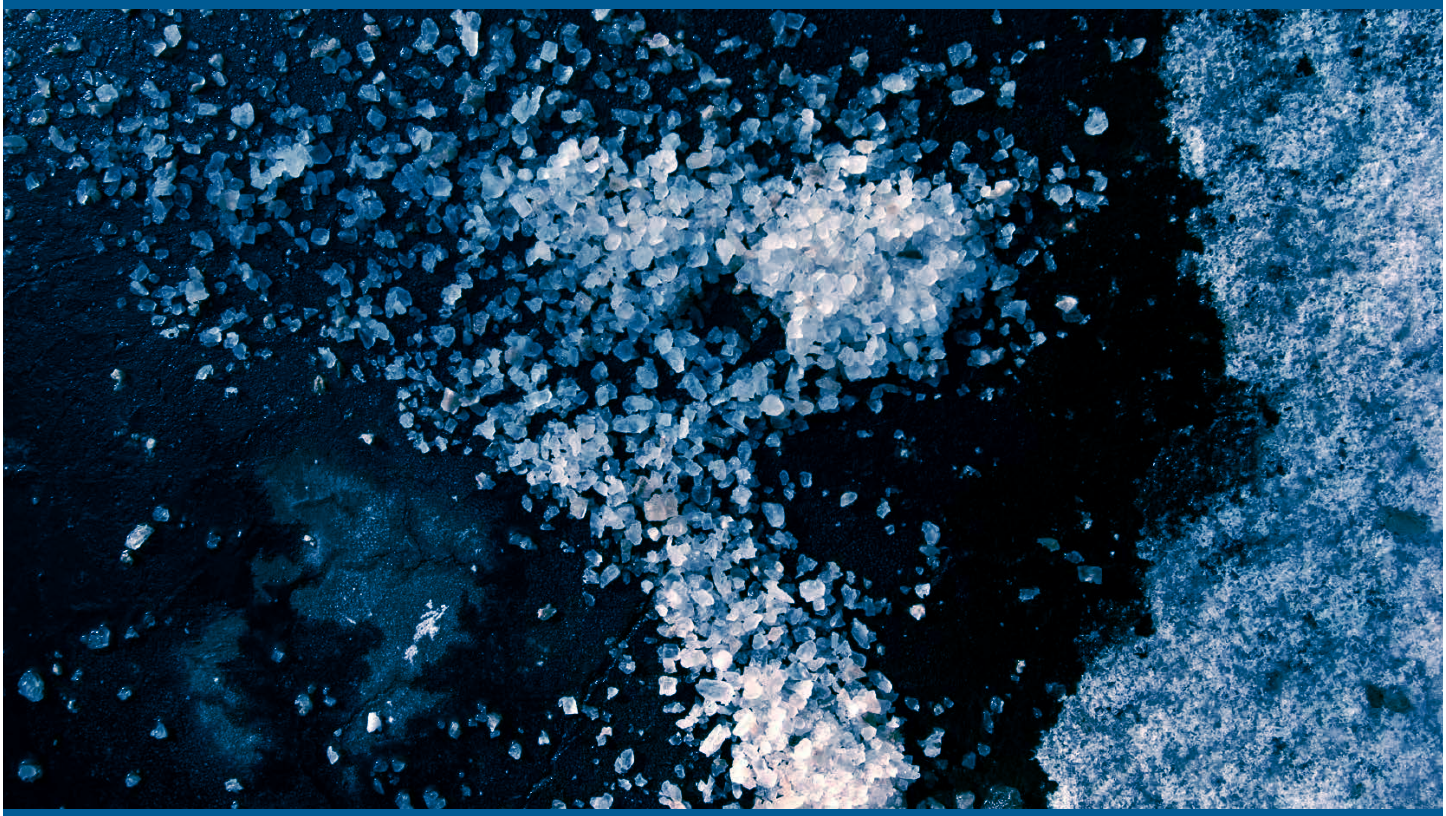
WalkS.A.F.E.



Salting for Winter Safety

One way to help keep employees safe is by being prepared for the icy conditions that winter can bring, and being ready to take action to eliminate it as quickly as possible.

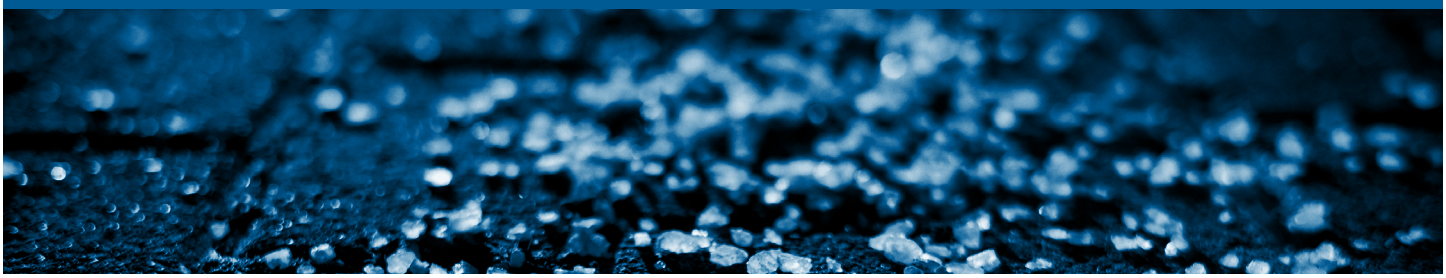
AccidentFund AccidentFund.com/walksafe/

UnitedHeartland UnitedHeartland.com/walksafe/

CompWest CompWestInsurance.com/walksafe/

ThirdCoast Underwriters 3CU.com/walksafe/

AF Group



General Safety Tips

When it comes to slip and fall prevention, salting and shoveling are key areas to pay attention to in any climate. As you get ready to complete these tasks, think about doing so safely in order to prevent injuries. With this in mind, we encourage you to remember the following tips when completing salting, snow removal and other winter-weather activities:

Plan Ahead

Before you begin removing snow and spreading salt, it's critical to make preparations that'll help you avoid slip and fall injuries. Here are some common sense things to consider:

- If you notice your parking lot, sidewalks, building entrance or any area where an employee or customer needs to walk is slippery, tell someone right away.
- Spread salt and ice-melting compounds safely, taking small steps — essentially walking like a penguin.
- Wear slip-resistant footwear and good boots. There are many companies that manufacture slip-on snow cleats and shoe coverings. Cleats grip the ice and help reduce falls on snow and ice.
- Entering buildings has its hazards as well. Wet shoes on wood or tile floors can make for a very slippery combination. It's helpful to have a mat right inside the doorway on a wood or tile floor so you can take your shoes off.
- Be careful when salting or removing snow at night. There could be hidden dangers, such as snow-covered ice or black ice.

Don't Overexert Yourself

Shoveling heavy and wet snow can be a challenge.

If you have to shovel, do so at a comfortable pace and only handle what you physically feel comfortable with. Be sure to use the right tools for the job as well — there are many types of shovels that are ergonomically designed to provide assistance.

How many pounds you lift when you shovel will depend on the type, depth, and water content of the snow and the amount of space you have to clear.

- Light, fluffy snow might weigh as little as five pounds per cubic foot.
- Compacted snow can weigh 20 pounds per cubic foot.
- Heavy, wet snow can weigh even more and feel like you're shoveling wet cement.
- There are other variables in snow weight, but to give you an idea, an average cubic foot of snow weighs about eight to 10 pounds, so if you have three cubic feet of snow on the shovel, that's like tossing up to 30 pounds. It may not seem like a lot right now, but after many shovels full, it adds up.

Snow shoveling requires you to lift a lot of weight in a short span of time and puts a lot of stress on your back and body. Key things to remember include:

- Do stretches of the lower back, arms, legs, hamstrings and shoulder muscles.
- When you shovel, keep your back straight and bend your knees.
- Keep your knees shoulder-width apart.
- Lift with the legs and not your back.
- It's best if you don't twist and throw the snow — if possible, try and place the snow where you want it or throw it forward.
- Space your hands apart; this will give you better leverage lifting the snow.
- Twisting while holding the weight of the snow can hurt your back. If you want to throw the snow, don't load up the shovel. Take smaller scoops of snow and be sure to take breaks and catch your breath occasionally.
- If you feel any kind of pain, stop shoveling.

The Tools for the Job

What you use for the job is as important as how you do it.

- Get good shovels. If they are damaged, discard and obtain new ones. A lightweight shovel will weigh less than an old metal one.
- The shovel should be about chest-high. If the shovel is too short, you end up bending too much. If the shovel is too long, it causes the snow to actually weigh more and the lifting to be that much harder, not only hurting your back, but also your wrist and forearms.
- Prior to using a snow blower, be sure to read and understand the operation manual.
- There are many hazards you might not think of when it comes to snow blowers, including exposure to carbon monoxide, strains from pushing/pulling and getting caught in moving parts.

The list of things to make sure you do when it comes to snow blowing is important:

- Operate with good visibility.
- Wear proper outer gear to prevent frostbite and good footwear to eliminate slip and falls.
- Wear adequate safety gear, including safety glasses with side shields, appropriate hearing protection and protective gloves.
- Avoid wearing loose clothing, scarves or jewelry that could get caught in moving parts.
- If the blower clogs, completely turn off the power. Never stick body parts in the auger to remove jams. Ideally, take it into someplace warm to let the snow melt and then remove the clog. Many blowers come equipped with a small shovel/pick to remove clogged items.
- Keep others away from the discharge end of the blower so they don't get injured by flying debris. If you have to use the blower on gravel, adjust the runner so the scraper blade doesn't contact the loose stones and make them projectiles.
- If you operate on a grade/slope, do so at slower speeds so you can control the blower.
- Gasoline is extremely flammable, so handle with care, clean up spills and don't smoke when re-fueling your blower.

Salting

The majority of commercially-purchased bags of salt commonly weigh 40 to 50 pounds. Ideally, you want to dump the contents of the salt into a portable spreader to easily wheel the salt and disperse where needed. There are many types of spreaders and even ones that fit onto the back of pick-ups and other snow removal equipment.

Watch Out for Cold Weather Injuries

Lacerations do occur in winter months, often due to skin becoming dry as the cold winter air robs the moisture from our bodies. If you are doing any cutting, trimming or even opening salt bags, do so with caution and wear proper gloves. Never cut items toward your body. If you use a knife or scissors to cut, make sure it's sharp.

Wear proper clothing to keep warm and prevent frostbite. Seasoned cold weather professionals always tell you to dress in layers. If you show any signs of frostbite or hypothermia, including redness, numbing or swelling of the extremities, confusion, or slurred speech, immediately go inside and seek medical help.

All About Salt and Ice-Melter

The science behind these products is such that throwing more ice-melt compound on the ice won't help it melt faster; it will just waste resources. The compound will not dissolve or melt and will simply be dragged into buildings and cars or effect landscaping. Here are some key points to keep in mind:

- Ice-melt compounds are only effective down to specific temperature limits that vary by compound. Know these temperatures, referred to as eutectic temps, and monitor them to ensure effective use of your ice-melt compound. Remember, adding additional ice-melt compound to areas already well-treated will be simply wasting compound.
- Periodically inspect areas where ice-melt compound has been spread — has the melting action of the compound been reduced as the solution concentration has changed? Should more compound be spread to increase the solution concentration?
- The higher the air temperature, the more effective the melting action of the ice-melt compound. Knowing the outdoor air temperature and the lowest temperature for effective use of your ice-melt compound should guide you when ice-melt should be applied to walking surfaces and up to what point it will no longer be effective.
- The temperature of the air, pavement, and the type of ice-melt compound used will affect the rate at which the ice melts.

There are many different ice-melt compounds available from traditional rock salt (sodium chloride) to ice-melt pellets (calcium chloride). Each compound has unique properties and costs that should be factored in when determining what ice-melt compound is best for your use.

Both sodium chloride and calcium chloride can be acquired in bulk quantities at relatively low cost. The disadvantage of these compounds is they tend to be corrosive to concrete or steel and can be harmful to vegetation. However, other less corrosive or less toxic compounds tend to be more expensive and may make it more difficult to treat needed areas.

Knowing What to Use

It's important that your organization assess your needs for application of ice-melt compounds. Consider the areas to be covered, access to traffic and sunlight, which improve the effectiveness of ice-melt compounds, and methods for treating needed areas and cost.

The Science Behind Ice-Melt Is?

Ice-melting compounds lower the freezing point of water. These products attract moisture to themselves to form a liquid brine solution which can generate heat and melt the ice. The amount of ice that is melted by a given quantity of ice-melt compound will decrease as the temperature of the mixture is lowered. As the ice melts, the compound solution's concentration is reduced and the freezing point of the water starts to increase until such time that more ice-melt compound is spread on the ice and water.

The lowest melting point of the water and ice-melt compound solution is termed the "eutectic" temperature. At this limiting eutectic temperature, solutions of the ice-melt compound aren't effective and the melting action on the ice will cease.

The quantity of ice-melt compound needed to lower the freezing point of ice to the eutectic temperature is called the "eutectic concentration." At this lowest temperature, the rate at which ice melts is very slow. When this melting action slows, adding more compound has no impact on lowering the eutectic temperature, thus, the ice melts no faster.

What About Employees Who Work Off-Premises?

Employees traveling on business away from your company's facility are presented with unique slip and fall exposures. While salting and snow removal procedures can be controlled at your own site, employees traveling on business can find themselves facing precarious conditions when they reach their final destination.

Home health care professionals, truck drivers, sales personnel and other employees traveling on business often encounter parking lots, sidewalks and steps covered with ice and snow. Here are a few tips to consider to reduce slip and fall injuries while traveling on business to customer locations.

Parking — Park in a location that reduces the exposure to walking on ice and snow, as close to your final destination as possible. Look for a covered parking structure whenever possible or a lot where snow plowing and salt application has been completed.

Exiting a Vehicle — Many slip and fall injuries take place next to vehicles. When exiting your car, scan the area where you will be parking for ice and snow accumulation. Remember that black ice under a light snow can be very slippery. If you are in a car or light truck, open the door and swivel both of your legs to stand up on both of them at the same time for more balance. Hang onto the door for stability until the surface around the vehicle can be accessed.

Exiting a Large Truck — Maintain three points of contact as you descend from the truck. Face the truck, using the hand holds and steps, taking extra time to prevent a fall.

Walk Like a Penguin — When walking on slippery surfaces, take shorter steps to maintain better balance.

Travel Path — Walk in designated walkways as much as possible, scanning the travel path in front of you. Avoid shortcuts through landscaping, over snow piles and areas where snow and ice removal has not been completed.

Carrying Laptops and Materials — Consider the amount and weight of items being carried, as they can shift your balance and cause you to fall. Use a cart to pull the laptop case and materials, as this will lower your center of gravity.

Steps and Handrails — Try to avoid carrying items with your hands. If possible, use a carrying case with a shoulder strap and maintain contact with handrails as you ascend or descend steps.

Footwear — Select and use footwear appropriate for walking in winter weather conditions.

Entering Buildings — Remove snow and water from footwear to prevent creating wet slippery conditions indoors.

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