

Safety Matters



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The Cold Stress Equation – Frostbite

What cold temperatures mean for your safety

Cold-related injuries and illnesses coupled with low temperatures, brisk winds, or wet clothing can have dangerous effects on a person's body. The Occupational Safety and Health Administration (OSHA) has named this dangerous combination The Cold Stress Equation



Often leading to frostbite, the Cold Stress Equation causes deep layers of the skin and tissue to freeze. The skin becomes pale, waxy-white, hard, and numb. This condition usually affects the fingers,

hands, toes, feet, ears, and nose.

If you suspect that a co-worker has frostbite, please do the following:

- Move the person to a warm, dry area. Do not leave him or her alone.
- Remove any wet or tight clothing that may cut off blood flow to the affected area.
- **DO NOT** rub the affected skin, as this can cause damage to the skin and tissue.
- Gently place the affected area in warm water (105° F) to slowly warm the tissue. Do not pour warm water directly on the skin because it may warm the tissue too fast and cause damage. Warming the skin generally takes about 25 to 40 minutes.
- After the affected area has been warmed, it may become puffy and blister, accompanied by a burning sensation or numbness. When normal movement, feeling, and skin color have returned, dry the affected area, and keep it warm.
- If the affected area could get cold again, do not warm the skin. Should the skin be warmed and then become cold a second time, there could be severe tissue damage. With all frostbite cases, the injured person should seek medical attention immediately.

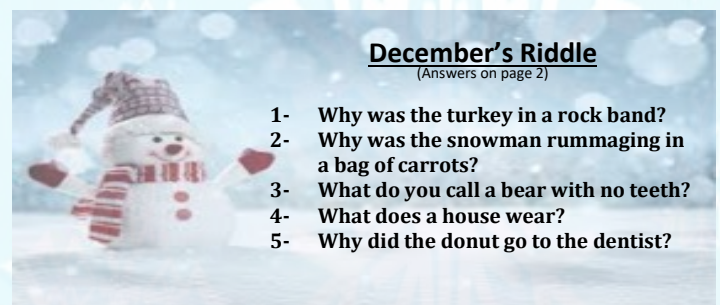
Occupational Safeguard

Safety is both your responsibility and the responsibility of your employer. Keep these recommendations in mind to avoid cold weather injuries and illnesses:

- Recognize environmental and workplace conditions that may lead to potential cold-induced ailments.
- Learn the symptoms of cold-induced ailments as well as what to do to help yourself or others.
- Select proper clothing for cold, wet, and windy conditions. Layer clothing to adjust to changing temperatures and wear a hat, gloves, and underwear that will keep water away from the skin.
- Take frequent, short breaks in warm, dry shelters to allow the body to warm up.

When in a cold environment, your body keeps internal organs warm by increasing blood flow to the core and decreasing blood flow to the extremities. As a result, you're at an elevated risk for frostbite. Be safe on the job, when exposed to cold temperatures for extended period of time.

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December's Riddle

(Answers on page 2)

- 1- Why was the turkey in a rock band?
- 2- Why was the snowman rummaging in a bag of carrots?
- 3- What do you call a bear with no teeth?
- 4- What does a house wear?
- 5- Why did the donut go to the dentist?

Safety Focused

Snow Shoveling Safety

When winter arrives—often bringing low temperatures and snowfall with it—the seasonal transition may require you to start periodically shoveling snow. Although this task is necessary to help clear pathways and prevent ice buildup, shoveling snow comes with serious safety risks.

After all, repeated shoveling requires significant physical exertion, which—when paired with the frigid outdoor elements—can take a dangerous toll on your body. That’s why it’s crucial to utilize proper precautions while you shovel snow.

The Risks of Shoveling Snow

The most prevalent risks associated with shoveling snow include:

- **Sprains and strains**—Because shoveling requires you to repeatedly move potentially heavy amounts of snow in an awkward position for an extended period, this task can easily cause sprains and strains if you aren’t careful. These injuries typically occur in your wrists, shoulders, back, and ankles.
- **Hypothermia**—Working in cold weather can heighten your risk of experiencing hypothermia, which occurs when your body’s core temperature falls below 95 degrees Fahrenheit. Symptoms of hypothermia include shivering, drowsiness, shallow breathing, confusion, slurred speech, loss of coordination, and unconsciousness. Severe cases of hypothermia can be fatal.
- **Frostbite**—Working in chilly conditions can also increase your risk of developing frostbite, which entails freezing the skin and its underlying tissues. Frostbite can result in stinging, numbness, and blistering in the affected areas, if left untreated, frostbite can cause permanent tissue damage.
- **Heart complications**—If you overexert yourself while shoveling snow, the cold weather could contribute to a sharp rise in your heart rate and blood pressure, thus decreasing your overall blood supply and potentially causing a heart attack—which could be fatal.

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General Best Practices

Here are some basic safety precautions to keep in mind when shoveling snow:

- Avoid shoveling immediately after eating or while smoking.
- Take a few minutes to stretch before you begin shoveling to better prepare your body for the physical demands of the task.
- Try to push the snow instead of lifting it. If you must lift snow while shoveling, use a smaller shovel or only partially fill your shovel with snow to avoid lifting too much at a time. In addition, be sure to lift with your legs rather than your back.
- Don’t overexert yourself. Pay attention to how you feel while you shovel—never work to the point of exhaustion. If you begin to feel overly fatigued, stop shoveling.
- When handling large amounts of snow, consider utilizing a snow blower rather than a shovel to avoid the extra labor. However, make sure you are properly trained to do so.

How to Prevent Hypothermia and Frostbite

Be sure to implement these additional safety measures to prevent hypothermia and frostbite:

- Always check the weather before working outdoors to properly prepare yourself. Try to limit your time shoveling if weather conditions are extremely cold, wet, or windy.
- Make sure you dress appropriately for the task at hand. Wear several loose layers of clothing, a warm hat that fully covers your head and ears, mittens (rather than gloves), and thick socks that will keep your feet dry.

Safety First

Your safety is our priority. Have a wonderful Holiday and we will see you in the New Year

Answers

- 1- **He was the only one with drumsticks!**
- 2- **He was picking his nose!**
- 3- **A gummy Bear.**
- 4- **A dress**
- 5- **To get a filling.**