



WINTER FIRST AID

TOOLBOX TALK SERIES – FIRST AID

December 2024

During the winter months, workers are exposed to cold temperatures that can lead to various cold-related injuries, such as frostbite and hypothermia. These conditions can be life-threatening if not treated promptly. It's essential to recognize the symptoms and know how to provide basic first aid until professional medical help can arrive.

In this toolbox talk, we'll cover the basics of recognizing and treating cold-related injuries to keep ourselves and our coworkers safe.

1. Hypothermia

What is Hypothermia?

Hypothermia occurs when the body's core temperature drops below 95°F (35°C), usually as a result of prolonged exposure to cold weather. It can cause a person to lose the ability to think clearly, making it a serious medical emergency.

Symptoms:

- Shivering (which may stop as hypothermia worsens)
- Confusion or memory loss
- Slurred speech or slow reaction times
- Extreme fatigue or weakness
- Uncoordinated movements or stumbling
- Pale, cold skin
- In severe cases, unconsciousness



First Aid:

- **Move the person to a warm environment:** Get them indoors or to a shelter as soon as possible.



- **Remove wet clothing:** Replace wet clothes with dry, warm clothing. Use blankets, coats, or any available warm coverings to insulate the body.
- **Warm gradually:** Use body heat to warm the person. Gently warm the person's torso (especially chest, armpits, and groin) using warm, dry cloths, bottles of warm water (not hot), or blankets.
- **Avoid direct heat:** Do not use hot water or heating pads directly on the skin, as this can cause burns.
- **Monitor vital signs:** Check for signs of frostbite or unconsciousness. If the person is not responsive or breathing, begin CPR and seek immediate medical help.

2. Frostbite

What is Frostbite?

Frostbite occurs when skin and underlying tissues freeze due to prolonged exposure to very cold temperatures. It most often affects extremities such as fingers, toes, ears, and noses.

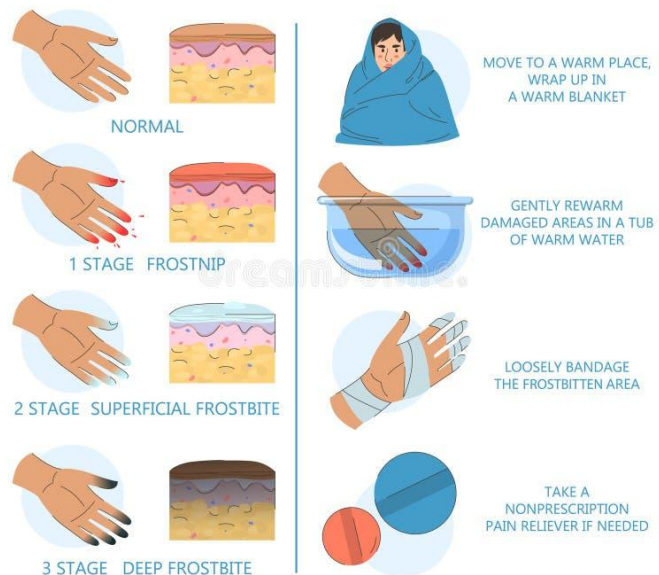
Symptoms:

- Numbness or a tingling sensation
- Red or pale skin that may turn bluish or purplish
- Hard or waxy skin
- Swelling or blisters (in more severe cases)

First Aid:

- **Move the person to warmth:** Get the affected individual out of the cold as quickly as possible.
- **Gently warm the affected area:** Immerse the frostbitten areas in warm (not hot) water—around 100-105°F (38-40°C)—for 20-30 minutes. If no water is available, use body heat (such as placing affected fingers under the armpits).
- **Do not rub:** Avoid rubbing or massaging the frozen area, as this can cause further tissue damage.

FROSTBITE STAGES AND FIRST AID





- **Do not thaw if refreezing is possible:** If there is a risk of the affected areas refreezing (i.e., if the person must be moved back outdoors), do not attempt to thaw the frostbitten area.
 - **Seek medical help immediately:** Frostbite can cause permanent tissue damage, so it is critical to get the person to a healthcare provider as soon as possible.
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3. Trench Foot (Immersion Foot)

What is Trench Foot?

Trench foot occurs when feet are exposed to cold and wet conditions for long periods of time. It can develop when shoes or socks are wet and are not removed or dried out, leading to poor circulation and possible tissue damage.

Symptoms:

- Swelling and redness in the feet
- Numbness or a cold sensation
- Blisters or open sores
- Skin that turns pale or blue
- A feeling of heaviness in the affected feet

First Aid:

- **Move to warmth and dry feet:** Get the person out of the cold, remove wet socks and shoes, and dry the feet carefully.
- **Warm the feet:** Place the person's feet in warm (not hot) water to restore circulation, or use blankets or warm clothing to gently warm the feet.
- **Do not massage:** Avoid massaging or rubbing the feet, as it could cause further injury.
- **Seek medical attention:** If symptoms persist or worsen, seek medical treatment. Severe trench foot can lead to permanent tissue damage.





4. Prevention Tips

- **Dress in layers:** Wear moisture-wicking base layers, warm insulating layers, and a waterproof outer layer to keep dry.
 - **Cover extremities:** Wear hats, gloves, scarves, and warm socks to protect exposed skin from frostbite.
 - **Stay dry:** Wet clothing loses its insulating properties and increases the risk of hypothermia. Change out of wet clothes immediately.
 - **Take breaks:** If working in cold conditions, take regular breaks in warm areas to reduce the risk of cold-related injuries.
 - **Stay hydrated:** Dehydration can increase the risk of hypothermia. Drink warm, non-alcoholic fluids regularly.
 - **Know the symptoms:** Familiarize yourself with the signs of cold-related injuries so you can act quickly if a coworker shows symptoms.
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Conclusion

Winter cold-related injuries, such as hypothermia, frostbite, and trench foot, can be serious and even life-threatening if not treated properly. By recognizing the signs early and administering first aid promptly, you can help prevent further injury and protect yourself and your coworkers from the harsh effects of the winter weather.

Remember: If in doubt, always seek professional medical help as soon as possible.

