

# COLD STRESS

*How to protect yourself and others when working in cold weather*

Cold temperatures, wind speed and wetness cause heat to leave the body more quickly, which puts workers at risk for cold stress. Dressing improperly, having wet clothing or skin and working while exhausted increases your risk for cold stress.

Anyone working in a cold environment – like cold weather, cold water or an indoor freezer may be at risk for serious injuries, illness or even death. Precautions can be taken while working in these cold weather environments to help ensure that you and others are safe.

## Common Types of Cold Stress

### Hypothermia

Normal body temperature (98.6°F) drops below 95°F or less.

**Mild Symptoms:** Alert, but shivering, fatigue, loss of coordination.

**Moderate to Severe Symptoms:** Violent shivering or shivering stops, confusion, slurred speech, heart rate/breathing slow, loss of consciousness, dilated pupils, death.

### Frostbite

Body tissue freeze, for example: hands and feet. Can occur at temperatures above freezing, due to wind chill. May result in amputation.

**Symptoms:** Numbness, reddened skin develops gray/white patches, feel firm/hard and may blister.

### Trench Foot (Immersion Foot)

Non-freezing injury to the foot, caused by lengthy exposure to wet and cold environments. Can occur at air temperature as high as 60°F, if feet are constantly wet.

**Symptoms:** Redness, swelling, numbness and blisters.

### Hypothermia

- Call 911 immediately in an emergency.
- To prevent further heat loss: move the worker to a warm place, change to dry clothes, cover the body (including head and neck) with blankets, and with something such as a tarp to block the cold. Do not cover the face.
- If medical help is more than 30 minutes away: give warm, sweetened drinks if alert (no alcohol), apply heat packs to the armpits, sides of chest, neck and groin. Call 911 for additional rewarming instructions.

### Frostbite

- Follow the instructions recommended for hypothermia.
- Do not rub the frostbitten area.
- Avoid walking on frostbitten feet.
- Do not apply snow/water. Do not break blisters.
- Loosely cover and protect the area from contact.
- Do not try to rewarm the area unless directed by medical personnel.
- Remove wet or tight clothing that may restrict blood flow.

### Trench Foot (Immersion Foot)

- Remove wet shoes/socks; air dry (in a warm area); keep affected feet elevated and avoid walking. Get medical attention.
- If permissible by medical personnel, thoroughly clean and dry your feet.
- If permissible by medical personnel, treat the affected part by applying warm packs or soaking in warm water (102° to 110° F) for approximately 5 minutes.
- Put on clean, dry socks daily and do not wear socks while sleeping or resting.

## What to do When a Work Suffers From Cold Stress

### For Prevention, Your Employer Should:

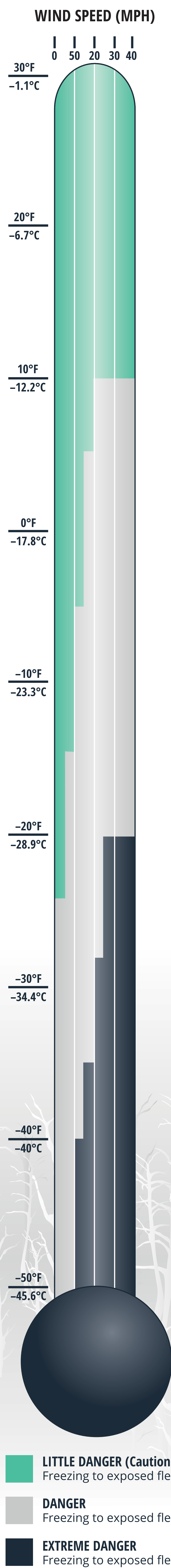
- Train associates on cold stress hazards and prevention.
- Make sure employees can recognize early cold stress symptoms.
- Provide engineering controls, ex: radiant heaters, to heat work areas.
- Gradually introduce workers to the cold, monitor workers and schedule breaks in warm areas.

### First Aid:

If a victim shows signs or reports symptoms of frostbite or hypothermia, get them out of the cold immediately – seek help from a doctor or trained first aid attendant.

### If Treating Victim

- Handle gently. Rough handling can cause heart beat irregularities and death.
- Do NOT give victim hot fluids unless they are fully alert and show no sign of confusion.
- Remove all wet clothing and cover with warm, dry clothes/blankets.
- Let the victim shiver, even if they are shivering violently.
- Do NOT massage the victim's hands, arms, legs, feet or body.
- Do NOT put the victim into a warm bath or shower.
- Check the victim's airway, breathing and circulation; give CPR if necessary.
- If the victim's breathing is slow and shallow, give them oxygen.
- Keep treating the victim even if they appear lifeless. They might still be alive and you may still be able to save their life!



**ORR Safety** has everything you need for working in cold weather conditions.

See our cold weather products by visiting the link below!

<https://info.orrsecurity.com/warm-for-winter>

