Cold Stress

OSHA Training





What is cold stress?

 Wind speed + low temperatures x any moisture = increased risk for injury due to cold.

- Risk factors for cold stress include:
 - Wetness/dampness, dressing improperly, and exhaustion
 - Health conditions such as hypertension, hypothyroidism, and diabetes
 - Poor physical conditioning

How to prevent cold stress

Conditions

Recognize the conditions that can lead to cold stress, and how to avoid them.

Symptoms

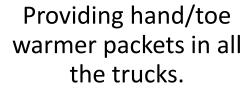
Recognize the symptoms of cold stress.

Prepare

Be prepared for potential exposure to cold stress-inducing conditions.

HSG works to prevent cold stress by







Providing warm uniform pieces.



Working in teams for safety.



Monitoring weather conditions and calling snow/cold days



Hypothermia

- when body temp drops below 95°F

- Can occur at cool, not freezing, temperatures if a person becomes chilled from rain, sweat, or immersion in cold water.
- Symptoms: **uncontrollable shivering** is the first indicator of the onset of hypothermia, do not ignore it.
 - Moderate to severe symptoms of hypothermia are loss of coordination, confusion, slurred speech, heart rate/breathing slow, unconsciousness and possibly death.
 - Body temperature that is too low affects the brain, making the victim unable to think clearly or move well. This makes hypothermia particularly dangerous because a person may not know what is happening and won't be able to do anything about it.

Hypothermia First Aid

- Move the worker to a warm, dry area.
- Remove any wet clothing and replace with dry clothing. Wrap the entire body (including the head and neck) in layers of blankets; and with a vapor barrier (e.g. tarp, garbage bag) Do not cover the face.
- If medical help is more than 30 minutes away:
 - Give warm sweetened drinks if alert (no alcohol), to help increase the body temperature. Never try to give a drink to an unconscious person.
 - Place warm bottles or hot packs in armpits, sides of chest, and groin. Call 911 for additional rewarming instructions.



Frostbite

- freezing of skin and tissue

- Can cause permanent damage, necessitate amputation.
- Increased risk for those with poor circulation.
- Dress in layers, cover exposed skin.
- Symptoms: Reddened skin develops gray/white patches in the fingers, toes, nose, or ear lobes; tingling, aching, a loss of feeling, firm/hard, and blisters may occur in the affected areas.

Frostbite First Aid:

- Follow the recommendations described for hypothermia.
- Protect the frostbitten area, e.g., by wrapping loosely in a dry cloth and protect the area from contact until medical help arrives.
- DO NOT rub the affected area, apply snow or water, or break blisters.
- DO NOT try to re-warm the frostbitten area before getting medical help, for example, do not use heating pads or place in warm water. If a frostbitten area is rewarmed and gets frozen again, more tissue damage will occur. It is safer for the frostbitten area to be rewarmed by medical professionals.
- Give warm sweetened drinks if alert (no alcohol).



Chilblains

- inflammation

• Painful inflammation of small blood vessels in the skin, caused by the repeated exposure of skin to temperatures just above freezing to as high as 60°F.

• Symptoms - Redness, itching, possible blistering, inflammation, and possible ulceration in severe cases.

Chilblain First Aid:

- Avoid scratching.
- Slowly warm the skin.
- Use corticosteroid cream to relieve itching and swelling.
- Keep blisters and ulcers clean and covered.



Trench Foot

- Prolonged exposure to wet conditions

- Wet feet lose heat 25x faster than dry feet.
- Symptoms: Reddening skin, tingling, pain, swelling, leg cramps, numbness, and blisters.
- Prevent it by keeping your feet dry, condition and waterproof your boots weekly. Bring extra socks. Bread bag technique.

Trench Foot First Aid:

- Remove wet shoes/boots and wet socks.
- Dry the feet and avoid walking on them.
- Keep affected feet elevated and avoid walking.
- Get medical attention/call 911 in emergency

Weather and Working





the effect of low air temperature combined with wind speed.



Windchill advisory:

potentially hazardous conditions with continuous exposure.



Windchill warning:

life threatening conditions within minutes of exposure.

Fuel for Cold Days

• Increase the amount of food you pack as the weather gets colder

More protein and carbohydrates for energy

More fluids

Bring a thermos of warm beverage of choice.





Dressing for Cold

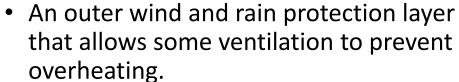
 Wear at least three layers of loose-fitting clothing. Layering provides better insulation.

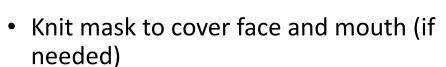


 An inner layer of wool, silk or synthetic to keep moisture away from the body.



 A middle layer of wool or synthetic to provide insulation even when wet.
An outer wind and rain protection layer







- Hat that will cover your ears, Hats reduce the amount of body heat that escapes from your head.
- Insulated gloves to protect the hands
- Insulated and waterproof boots to protect the feet



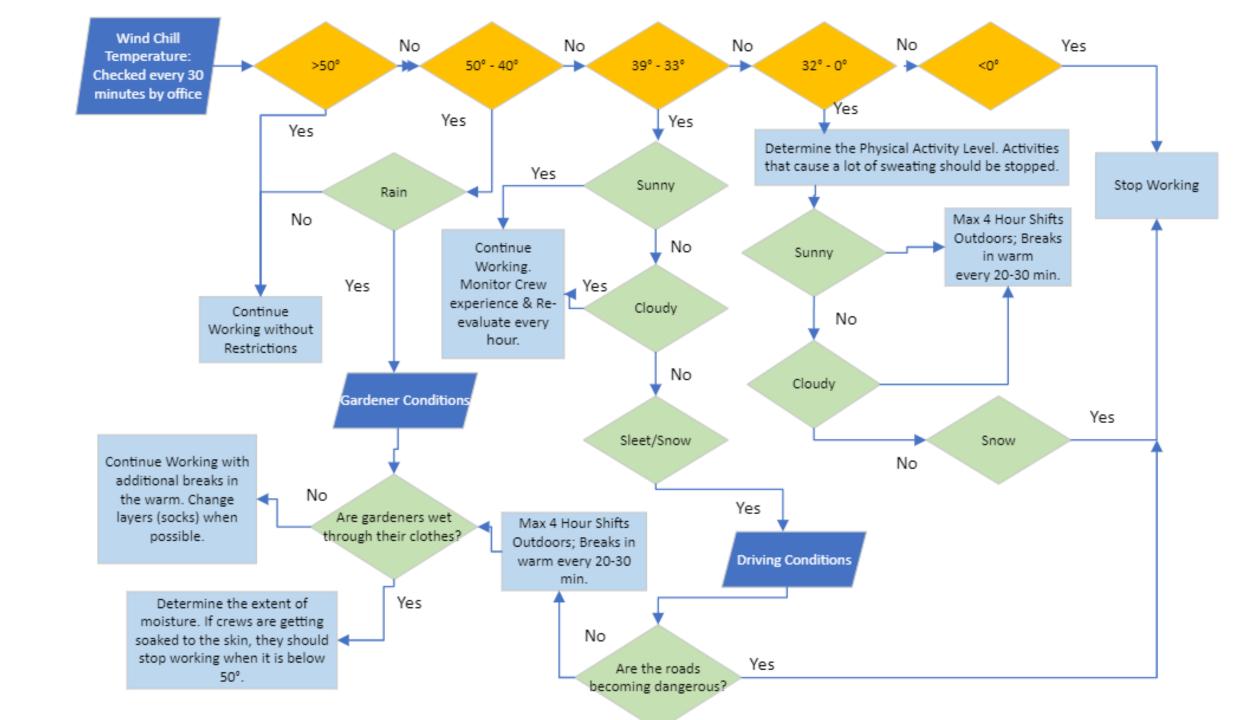






Source

OSHA Cold Stress



Tips from your fellow gardeners

- Don't blast the heat in the trucks
 - You get sweaty and then clammy when you get out
 - It makes cold weather feel colder
 - Take off your outer layers when driving so you can air out a bit and prevent clamminess
- Layer cheapo knit gloves under the insulated gloves for added warmth
- Any layer added is helpful
 - Leggings
 - Base layer
 - Pajama pants
 - Rain pants

OPERATIONS

HOME SOWN GARDENS LLC

Contents

- Statistics
- Seasonal Business Basics
- Off-Season Fun!

Stats



~194 Fall Cleanups



Average 10-11 hour days this time of year



~62 winter protection/insulation clients



Average 6 weeks left of season

SEASONAL BUSINESS BASICS

Business 101

- Expenses = Money Out
- Income = Money In
- Cash flow = Amount of money on hand

Expenses = Payroll, Rent, Supplies, Repairs, etc.

Income = Garden Maintenance, Projects

Basic Goal: Expenses = Income

Net Gain: Expenses < Income

Net Loss: Expenses > Income

Seasonal Businesses are Unique

How many weeks in a year? 52 weeks

How many weeks in an average Minnesota gardening season? 34 weeks

18 weeks in the off-season ————— ~1/3 year

Expenses don't change much, but cashflow does!

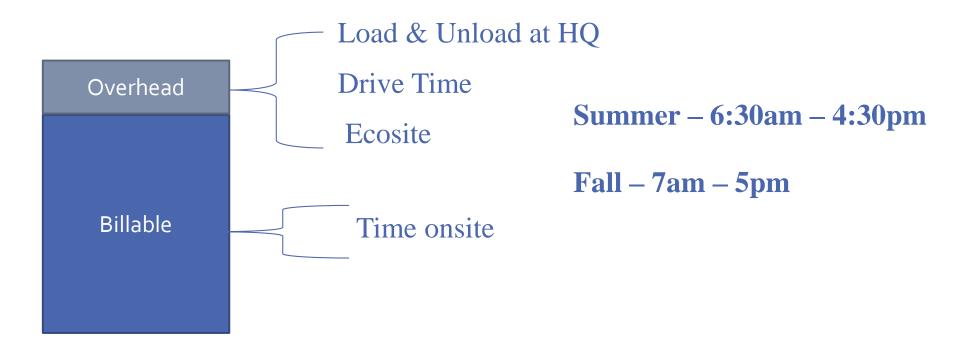
What It Means

- We are maximizing our revenue during this time to ensure our cash flow is stable for the off-season.
- We encounter variables such as cold/snow days, client preferences, staffing, etc. that impact our ability to finish jobs.

Therefore, we take advantage of good weather, full staffing, and unexpected short days to ensure we meet our client obligations and continue our business operations into 2023.

Daily Scheduling Structure

• We schedule a day based on 8 billable hours and 2 overhead hours:



We average 10-hour days. Reality is 9- to 12-hour days.

END OF SEASON THINGS

Seasonal Layoffs

- Seasonal staff are officially "laid off" when our Fall Clean-ups are done. We try to give as much notice as possible before the last day of work.
 - You will receive a Termination Letter via email that states the reason for the end of your employment as lack of work.
 - You will receive information from Millennium Trust regarding your IRA
 - You will receive information from me and the Ease platform if you participate in our health insurance plan
 - You will continue to have access to your Paychex account. You will have access to an electronic copy of your W-2 here.
- Before this happens, Tami will conduct Exit Interviews. Anticipate this occurring in November.