Cold Stress – Landscaping Meeting Kit

WHAT’S AT STAKE

Cold stress is a concern for landscaping workers who are required to work outdoors during the winter months. Exposure to cold can lead to a variety of health issues, including frostbite, hypothermia, and trench foot.

WHAT’S THE DANGER

Cold stress occurs when the body is unable to maintain a normal temperature due to exposure to cold.

Specific Risks:

1. **Hypothermia:**
   - **Definition:** Hypothermia occurs when the body’s core temperature drops below 95°F (35°C). This condition can develop quickly in cold, wet, or windy conditions.
   - **Symptoms:** Early symptoms include shivering, fatigue, confusion, and loss of coordination. Severe hypothermia can be fatal if not treated immediately.
1. **Frostbite:**
   - **Definition:** Frostbite is the freezing of skin and underlying tissues.
   - **Symptoms:** Frostbite initially causes the skin to become red and painful, then turns numb, pale, and hard. Severe frostbite can lead to permanent tissue damage and amputation.
1. **Trench Foot:**
   - **Definition:** Trench foot is a condition caused by prolonged exposure to wet and cold conditions.

- **Symptoms:** Symptoms of trench foot include tingling, itching, and pain in the feet, followed by swelling, blisters, and potential tissue death. Like frostbite, trench foot can cause permanent damage if not treated.

1. **Cold-Induced Injuries:**

- **Slips and Falls:** Cold weather can create slippery conditions due to ice and snow, increasing the risk of slips, trips, and falls. These incidents can lead to sprains, fractures, and other injuries.
- **Reduced Dexterity and Strength:** Cold temperatures can reduce hand dexterity and muscle strength, making it more difficult to perform tasks and increasing the risk of accidents.

HOW TO PROTECT YOURSELF

How to protect yourself and others when working in cold environments:

Dress for the Cold

1. **Layering Clothing:**

- **Base Layer:** Wear synthetic fabrics or wool, as a base layer to keep sweat away from the skin.
- **Insulating Layer:** Add an insulating layer made of materials like fleece to trap body heat.
- **Outer Layer:** Wear a waterproof and windproof outer layer to protect against wind, rain, and snow. This layer should be breathable to allow moisture to escape and keep out cold.

1. **Protecting Extremities:**

- **Head and Face:** Wear a hat or beanie to prevent heat loss through the head, and use a balaclava or face mask to protect the face from cold air and wind.
- **Hands:** Wear insulated, waterproof gloves to protect your hands from cold temperatures.
- **Feet:** Wear insulated, waterproof boots with moisture-wicking socks to keep your feet warm.

Safe Work Practices

1. **Pace Yourself**

- **Take Breaks:** Schedule regular breaks in a warm, area to allow your body to warm up.
- **Avoid Overexertion:** Avoid overexerting yourself, as sweating can lead to wet clothing, which increases the risk of hypothermia.

1. **Stay Hydrated and Nourished**

- **Drink Warm Fluids:** Stay hydrated by drinking warm, non-caffeinated beverages. Avoid alcohol, as it can increase heat loss and impair your ability to recognize cold stress symptoms.
- **Eat High-Energy Foods:** Eat, high-energy meals and snacks to maintain body heat and energy levels. Foods rich in carbohydrates are ideal for fueling your body in cold conditions.

1. **Monitor Weather Conditions**

- **Check the Forecast:** Before starting work, check the weather forecast, including temperature, wind chill, and potential for snow or ice. Adjust your work schedule as needed to avoid the coldest parts of the day.
- **Be Aware of Wind Chill:** Wind chill can make the temperature feel much colder and increase the risk of frostbite and hypothermia.

Recognizing and Responding to Cold Stress

1. **Know the Symptoms**

- **Early Warning Signs:** Be aware of the early signs of hypothermia (shivering, confusion, fatigue), frostbite (numbness, tingling, pale skin), and trench foot (cold, swollen, or painful feet).
- **Buddy System:** Use the buddy system to monitor each other for signs of cold stress.

1. **Respond Quickly**

- **Move to a Warm Area:** If you or a coworker show signs of cold stress, move to a warm, sheltered area.
- **Seek Medical Attention:** For severe cases of hypothermia, frostbite, or trench foot, seek medical attention immediately. Do not rub or massage affected areas, as this can cause further damage.

Training and Awareness

1. **Cold Stress Training**

- **Educate Workers:** Provide training on the risks of cold stress, proper clothing and layering techniques.
- **Emergency Procedures:** Train workers to handle cold stress, and when and how to seek medical help.

FINAL WORD

By dressing appropriately, following safe work practices, and staying vigilant for signs of cold-related illnesses, you can protect yourself and your coworkers from the dangers of cold stress.