

Cold Stress Prevention



How cold is too cold?

- No set temperature
- Colder than temperatures a person is used to
 - Ex: cases of hypothermia when temperature never dropped below 41°

What causes cold stress?

- Wet
- Improper clothing
- Exhaustion

How is cold stress prevented?

- Select proper clothing and properly layer it
- Take frequent short breaks in warm dry shelters
- Perform work during the warmest part of the day
- Never work alone in the cold
- Drink warm, sweet beverages without caffeine
- Eat warm, high calorie foods such as pasta dishes

Increased Risk of Cold Stress

- | | |
|--------------------------|---------------------------|
| • Cardiovascular disease | • Poor physical condition |
| • Diabetes | • Poor diet |
| • Hypertension | • Older ages |
| • Some medications | |

Cold stress equation:

Low temperature + wind speed + wetness = Injuries & Illness



Frostbite

What is frostbite?

- Freezing of deep layers of skin and tissue
- Can cause permanent damage

Recognizing frostbite

- Skin will look pale, waxy, and white
- Skin will become hard and numb
- Usually affects fingers, hands, toes, feet, ears, and nose

Treating frostbite

- Move person to warm, dry area
- Remove wet clothing
- Remove tight clothing that can restrict blood flow
- Gently place affected area in warm water (105 °), and monitor to slowly warm the tissue
- Warming process takes 25-40 minutes

Don't...

- Leave person alone
- Rub the affected area
- Pour water directly on affected area
- Attempt the warming process **if** the affected area may be exposed to freezing conditions again



Seek medical attention as soon as possible!



Hypothermia

What is hypothermia?

- Body temperature drops to or below 95°

Recognizing hypothermia

- Feelings of fatigue or drowsiness
- Uncontrolled shivering
- Cool bluish skin tone
- Slurred speech
- Clumsy movements
- Acts irritable, irrational, or confused

Responding to hypothermia

- **Call for emergency help immediately**
- Move person to warm, dry area
- Remove wet clothing
- Wrap them in warm, dry clothing and blankets
- Provide warm, sweet drinks
- Have person move arms and legs to generate muscle heat
- Place warm water bottles under armpits, by the groin, on the neck, and by the head

Don't...

- Leave person alone
- Give caffeine or alcohol
- Rub the person's body or place in a warm bath – this can stop the victim's heart!