

wind speed (mph)

30°F

-1.1°C

20°F

-6.7°C

10°F

-12.2°C

0°F

-17.8°C

-10°F

-23.3°C

-20°F

-28.9°C

-30°F

-34.4°C

-40°F

-40°C

-50°F

-45.6°C

COLD STRESS

LOW TEMPERATURE + WIND SPEED + WETNESS = INJURIES & ILLNESS

Working in a cold environment – like cold weather, cold water or an indoor freezer – can lead to serious injuries, illnesses and death.

FROSTBITE

DESCRIPTION: Freezing in the deep layers of the skin, usually on fingers, hands, feet, toes, ears and nose.

SYMPTOMS: Skin turns pale, hard and numb

WHAT TO DO:

- Move to a warm, dry area.
- Remove wet or tight clothing that may restrict flow of blood.
- Don't rub affected area – or you may cause damage.
- Gently put affected area in a warm 41°C (105°F) water bath and keep it there for 25 to 40 minutes. Don't pour water directly on skin.
- When normal feeling, movement and skin color return, dry and wrap affected area.
- Get medical help as soon as possible.

FIRST AID

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

IF TREATING VICTIM:

- Handle gently. Rough handling can cause heart beat irregularities and death.
- Don't give victim hot fluids unless he's fully alert and shows no sign of confusion.
- Remove wet clothing and cover with warm, dry clothes/blankets.
- Let victim shiver even if he's shivering violently.
- Don't massage victim's hands, arms, legs, feet or body.
- Don't put victim in warm bath or shower.
- Check victim's airway, breathing and circulation; give CPR if necessary.
- If victim's breathing is slow and shallow, give him oxygen.
- Keep treating victim even if he appears lifeless. Victim may still be alive and you may still be able to save his life.

HYPOTHERMIA

DESCRIPTION: When you become so cold that your body loses heat faster than it can produce it. Hypothermia is a killer. And it's sneaky. It often sets in so slowly that the victim dies without ever recognizing the danger.

SYMPTOMS:

MILD HYPOTHERMIA

- Shivering
- Grogginess, muddled thinking and abnormal behavior
- Breathing normal

MODERATE HYPOTHERMIA

- Violent shivering or shivering has stopped
- Inability to think and pay attention
- Slurred speech
- Poor body co-ordination
- Slow, weak pulse
- Slow, shallow breathing

SEVERE HYPOTHERMIA

- Shivering stopped
- Unconsciousness
- Dilated pupils
- Weak, irregular or non-existent pulse
- Little or no breathing

WHAT TO DO:

- Wear warm head covering.
- Wear layered clothing.
First layer: Underwear, socks, glove liners and other clothing that lets skin breathe by allowing sweat to escape.
Second layer: Insulating clothing that absorbs sweat but doesn't let heat out. Wool is ideal.
- Protect your hands and feet.
- Carry emergency supplies.
- Drink lots of non-alcoholic fluids.
- Pace yourself during vigorous activity.
- Try to heat the work area.

-  LITTLE DANGER (Caution)
freezing to exposed flesh within **1 hour**
-  DANGER
freezing to exposed flesh within **1 minute**
-  EXTREME DANGER
freezing to exposed flesh within **30 seconds**

