

## KEEP WARM – BE HEALTHY

How to prevent, recognize and treat hypothermia, frostbite, trench foot, and other cold-related illnesses

### HYPOTHERMIA:

Hypothermia is a drop of normal body temperature from 98.6° to 95°F or lower.

#### Warning Signs:

For anyone exposed to very cold temperatures for even a short time, and especially very young children, premature or small infants, or elderly people who keep the heat at home below 65°F, look for **violent shivering**. At the earliest stage of hypothermia, this is the most noticeable symptom. As body temperature continues to drop, symptoms will change. Look for:

- decrease and end of shivering
- distorted or slurred speech
- confusion or irrational behavior
- drowsiness or numbness
- weak pulse and shortness of breath
- loss of consciousness

***Hypothermia can be fatal if not treated.***

#### What to Do:

***SEEK MEDICAL ATTENTION IMMEDIATELY.***

The treatment for hypothermia requires special medical care that must be performed by trained personnel. While waiting, the following should be done:

- Prevent further heat loss by moving the person from the cold or by preventing further exposure to the cold.
- Remove wet or damp clothing and replace with dry clothing.
- Slowly give the person warm liquids to drink if (s)he is conscious.

**CAUTION: Do NOT attempt to warm the person any further. This may actually worsen the person's condition. If the arms and legs are warmed before the chest and abdomen, the person may go into shock.**

### FROSTBITE:

Frostbite is a series of three conditions which can increase in severity from early frostbite, or FROSTNIP; to superficial FROSTBITE; and to deep frostbite, called FREEZING; usually affecting the nose, ears, upper cheeks, hands and feet.

**Warning signs:**

Anyone exposed to cold, including workers who handle liquids such as gasoline or alcohol, should look for:

- The person's skin and the muscles under the skin feel soft to the touch;
- The skin reddens, then becomes white;
- The affected area feels numb.

If frostnip is not treated, it may develop into:

**FROSTBITE:**

- The skin feels hard to the touch but the muscles below it still feel soft;
- The affected area of the skin feels as if it's burning. The area then becomes numb.
- The affected area is red on a light-skinned person, or light-colored or white on a dark-skinned person.

If frostbite is untreated, it can develop further into

**FREEZING:**

- Both the skin and the muscles below it feel frozen and hard to the touch;
- The affected area turns a grayish-blue,
- In very severe cases, gangrene can develop.

**FROSTNIP:**

**What to Do:**

1. Gently warm the affected area by putting it against a warm part of body (such as in the armpit), or by blowing warm air onto it.
2. If the affected area still does not feel warm to the person:
3. Remove the person from the cold.
4. Gently warm the affected area by placing it in WARM (100°F to 105°F) water, which will feel comfortably warm to an UNAFFECTED person. Make sure that the body area with frostbite or freezing does not touch the container. The person may have some pain as the area warms up. This usually means that the treatment is working
5. DO NOT RUB THE AFFECTED AREA. This can cause severe damage to the skin and muscle.
6. Contact your health care provider to find out if additional treatment is needed.

**Note:** anyone (but most often a child) who touches a very cold surface with the lips, tongue or hands can become stuck to the surface and develop one of these conditions. If this happens, DO NOT separate the person's skin or tongue from the surface by force. Instead, pour warm (not hot) water or apply a warm, damp cloth to the area.

## **IMMERSION OR TRENCH FOOT:**

### **Warning Signs:**

If a part of the body is covered with water or wet mud that is just above freezing (32°F) for a prolonged period of time, or if clothing becomes wet in cold weather, look for:

- The affected area becomes swollen and pale;
- The affected muscles feel weak;
- The area feels numb and is cold to the touch;
- The person may become extra sensitive to cold.

### **What to Do:**

1. Remove all wet clothing;
2. Gently rewarm the affected area as described in "Frostbite";
3. Wrap with a sterile bandage;
4. Slightly raise the affected area;
5. Seek medical care. This condition can persist if untreated.

## **CHILBLAINS:**

Lesions on the skin, usually the face, ears, hands and feet.

### **Warning Signs:**

If you have had extended exposure to temperatures below 60°F, look for:

- Red, swollen areas that feel hot, tender and itchy.
- Chilblains usually occur 12 to 24 hours after exposure to the cold.

### **What to Do:**

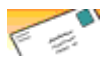
1. Protect the injured area from the additional damage by removing the person from the cold.
2. Because chilblains can last for months, the person should see a health care provider for additional treatment.

Too much exposure to the cold-or exposure to too much cold-can be hazardous to your health! Cold temperatures can cause several conditions, including the sometimes fatal hypothermia, three types of frostbite, common (but occasionally lingering) chilblains, or trench foot. To

prevent chances of developing these conditions, the New Jersey Department of health recommends:

- Maintain the temperature at home at no lower than 68°F.
- Keep warm clothing, such as a hat, gloves, socks, boots and a scarf, available in the home, at work and in your car. Keep blankets and easily stored, high calorie food such as nuts and candy in the car too.
- Wear clothing in layers, which will keep you warmer than a single, thick layer of clothing.
- Replace wet clothing with dry clothing as quickly as possible in cold weather.
- Make a special effort to keep warm if you work outside in the winter (in dry or wet conditions), or in an unheated workplace.
- Be extra careful in the cold weather if you:
  - Have any circulatory problems,
  - Are on medication such as chlorpromazine,
  - Are elderly,
  - Have young children, or
  - Participate in outdoor activities.
- Avoid using alcohol and tobacco. Both can increase chances of developing a cold-related illness.
- If you routinely look in on an elderly or disabled person, make sure that you check on them at least twice a day during cold spells.

***In cases of health emergencies, call your physician or visit your local hospital emergency room.***



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