Frostbite

Frostbite is an injury caused by freezing of the skin and underlying tissues. First your skin becomes very cold and red, then numb, hard and pale. Frostbite is most common on the fingers, toes, nose, ears, cheeks and chin. Exposed skin in cold, windy weather is most vulnerable to frostbite. It can occur on skin covered by gloves or other clothing as well. Possible complications of severe frostbite include infection and nerve damage.

Sign and Symptoms

- Cold skin that may itch, burn or feel like "pins and needles"
- Numbness
- Red, white, bluish-white or grayish-yellow skin
- Hard or waxy-looking skin
- Clumsiness due to joint and muscle stiffness
- Blistering after rewarming, in severe cases

Because of skin numbness, you may not realize you have frostbite until someone else points it out.

There are several stages to frostbite:

- Frostnip – this is a mild form. Continued exposure leads to numbness in the affected area. As your skin warms, you may feel pain and tingling. Frostnip doesn't cause permanent damage to skin.
- Superficial Frostbite – appears as reddened skin that turns white or pale. Your skin may begin to feel warm – a sign of serious skin involvement. If you treat with rewarming at this stage skin may appear molted as well you may notice stinging, burning and swelling. Blisters may appear hours later.
- Deep Frostbite – as frostbite progresses, it affects all layers of the skin, including tissue. Your skin turns white or bluish gray and you may experience numbness, losing all sensation of cold, pain or discomfort in the affected areas. Joints or muscles may no longer work. Large blisters form after 24 hours or more after rewarming. Afterward, the area turns black and hard as the tissue dies. Loss of limbs is possible in severe cases.

Treatment

1. Move the person to a warm place and remove any wet clothing.
2. Handle the area gently; never rub or massage the affected area.
3. Warm gently by soaking the area in warm water until it appears red and feels warm. Do not use direct heat from heating pads, fires, etc.
4. May administer oral pain medication as the rewarming process can be painful.
5. Loosely bandage the area with dry, sterile dressings. If the person's fingers or toes are frostbitten, place dry, sterile gauze between them to keep them separated.
6. Avoid breaking any blisters that may have appeared.
7. Do not allow the affected area to refreeze. Warming and then re-exposing the area can cause worst damage.
8. Seek professional medical care as soon as possible.

Hypothermia

Hypothermia occurs when your body loses heat faster than it can produce heat, causing a dangerously low body temperature. When your body temperature drops, your heart, nervous system and other organs can't work normally. Left untreated, hypothermia can lead to complete failure of your heart and respiratory system and eventually death.

Signs and Symptoms

- Shivering
- Slurred Speech or mumbling
- Slow, shallow breathing
- Weak pulse
- Clumsiness or lack of coordination
- Drowsiness or very low energy
- Confusion or memory loss
- Loss of consciousness
- Someone with hypothermia usually isn't aware of their condition because the symptoms often begin gradually.

Treatment

1. Call 9-1-1
2. Gently move the person to a warm place.
3. Monitor breathing and circulation.
4. If required and qualified give CPR.
5. Remove any wet clothing and dry the person.
6. Warm the person slowly by wrapping in blankets or by putting dry clothing on them. If outside lay the person on their back on a blanket or other dry warm surface. Do not massage or rub the person. Do not use hot water, a heating pad or a heating lamp to warm them.
7. If the person is alert and able to swallow provide a warm, sweet, non-alcoholic, non-caffeinated beverage to help warm them.

Do not warm the person too quickly, such as by immersing them in warm water. Rapid warming may cause dangerous heart arrhythmias. Warm the core first (trunk, abdomen), not the extremities (hands, feet). This is important to mention because most people will try to warm hand and feet first which can cause shock.