

## **Frostbite**

Frostbite occurs when a body part is exposed to extreme cold. If conditions are cold enough for the water within the tissues to freeze and form ice crystals, cell death can occur. The feet, hands, ears and nose are particularly prone to frostbite due to their location away from the body's core and the relative scarcity of blood flow to the feet compared to the rest of the body.

Mild exposure to cold typically produces pain and irritation of the skin. Greater exposure may produce burning and numbness as well as blistering and reversible damage to the outer skin layers. Eventually there will be complete loss of sensation and permanent damage to all layers of the skin, arteries, muscles and tendons.

Frostbite can be prevented by limiting exposure and keeping the feet as warm and dry as possible. If, however, frostbite is suspected, the feet should be rapidly re-warmed by immersion in warm water (approximately 100 degrees Fahrenheit). Avoid vigorous rubbing/massaging and dry heat (such as from a hair dryer), as burns may result if numbness is present. To avoid infection, blisters or damaged skin should be treated with antibiotic cream and loose bandages, and medical attention should be sought as soon as possible.