

## The Fall Report A Discussion of Health Issues



## **Frost Bite**

## Save your skin this winter by using some common-sense precautions.

With the onset of cold winter weather, Jack Frost can nip at more than just the window pane. Frost bite refers to the freezing of skin and/or subcutaneous tissue. Most commonly affected areas are ears, nose, hands and feet. Inadequate protection from cold exposure may lead to various levels of severity.

A number of factors influence the risk of developing this condition. These include air temperature, wind chill factor, adequacy of clothing protection and systemic disease. Patients with diabetes mellitus, peripheral vascular disease (poor circulation) or patients on certain medications – i.e. Beta blockers (Propranalol, Toprol, Atenolol) are at an increased risk to cold exposure. Other aggravating factors include smoking and the use of alcohol.

Symptoms include a "pins and needles" sensation, throbbing and aching followed by numbness of the affected part. Frost bitten skin is pale in color, cold and hard to the touch, and has no feeling. Frost bite may be classified by degrees, i.e. 1<sup>st</sup> 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> degree injury, with 4<sup>th</sup> degree injury affecting the full thickness of skin and involves underlying tissues as well. Tissue injury is greatest when cooling is slow, cold exposure is prolonged, rate of rewarming is slow and when partially thawed tissue refreezes.

First aid includes moving the patient to a warm shelter. Warm the affected part with warm water  $-104^{\circ} - 108^{\circ}$ F. As frozen tissue thaws, severe burning pain will be felt, as well as notable swelling and color changes.

## Some "Do-Not's" apply to frost bite treatment:

- DO NOT thaw a frost bitten area if it cannot be kept thawed refreezing will increase tissue damage
- DO NOT use direct heat, such as a radiator, camp fire, heating pad, or hair drier
- DO NOT rub or massage the affected area
- DO NOT disturb blisters
- DO NOT smoke or consume alcohol

Physician treatment may include pain medication (Ibuprophen), antibiotics, tetanus protection, and in rare, serious cases, surgical consultation.

Now, a word about prevention: The best defense against frost bite is to prevent skin exposure to a freezing environment. Adequately cover your head, neck, and face. Wear warm, well-fitting boots, not shoes, tennis shoes or sandals. Be thoughtful regarding the potentiality of un-expected cold exposure. Therefore, carry a "survival kit" in you vehicle containing warm clothes for the winter. In your home, place door locks high, to prevent your children from going out into the weather, perhaps while you are sleeping.

With some good common sense and being prepared to deal with unexpected weather conditions, you can save your skin!