

PEDIATRIC TRAUMA UPDATE

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COLD HURTS FROSTNIP VS. FROSTBITE

We lived through December and the bone chilling cold of January and feel like spring is just around the corner, but a quick look at the calendar tells us there are still cold days to come. From the ETC to the in-patient units we see children who have spent a bit too much time in the cold and have either frost bite or frost nip. So, what's the difference and how do you treat them?

Frostnip: This occurs when ice crystals form in the tissues, but no tissue destruction occurs and the crystals dissolve as soon as the skin is warmed. Most often frostnip affects areas such as the earlobes, cheeks, nose, fingers, and toes. The skin will turn pale and one will experience numbness or tingling in the affected part until warming begins. Please beware that

multiple cases of frostnip lead to decreased sensation and therefore a higher incidence of frostbite.

Treatment of Frostnip:

- Blow warm air on cold area
- Hold cold area next to warm skin.
- Injured areas should NEVER be rubbed!!

Frostbite: Frostbite is caused by exposure to cold without adequate protection. Three nearly simultaneous physiological processes underlie frostbite injury: tissue freezing, tissue hypoxia, and the release of inflammatory mediators. Indicators of frostbite—cool, pale (white or yellowish gray), and/or hard extremities (especially fingers and toes) or areas of the skin.

Treatment of Frostbite:

- Remove wet or tight clothing and apply dry/loose clothing or wraps.
- Avoid partial thawing and refreezing. Only rewarm if emergency help with take >2hours and refreezing can be prevented.
- Rewarming can be achieved by holding affected area to warm skin, immersion in warm (NOT hot) water. Do NOT re-warm utilizing high heat such as radiators, fireplaces, etc.
- Injured areas should NEVER be rubbed.
- Call physician and prepare for transport to the burn unit as needed.



Pediatric Trauma Cases January and February 2009

Number of Admissions	28
Number of ED visits	35
Deaths	1
Number of Trauma Alerts	15
Number of Trauma Activations	2

Special Points of Interest

- THANK YOU to all who helped prepare and complete our Pediatric Trauma Verification by the ACS. We are still awaiting final word, but we couldn't have done it without you!
- Want to "talk trauma"? Remember you can always send an e-mail to Trauma Talk using Microsoft Outlook e-mail.
- Questions or concerns related to Pediatric Trauma Care? Contact Kristel Wetjen @ 6-1299 or page 5239. kristel-wetjen@uiowa.edu

Think Layers...How to Dress in the Cold.



Start with a cotton-based layer which will wick sweat away from the body. Then add some warm layers.



Finish with a waterproof/windproof coat.

Socks which will wick away sweat and are not too tight in waterproof boots.



Most heat is lost through the head: Don't forget the HAT!!

Waterproof mittens are a must!

