# “Baby it’s cold outside!” all about frost bite

Breathless after a stint on the treadmill at the gym, I burst out of the building yesterday into the bitter cold. Startled by the frigid air, I reached into my winter coat pocket and pulled out… a pair of stinky socks. One of my kids handed them to me after swimming the other day and I had stuffed them into my pocket. Instantly all my visions of myself as a wonder-workout -woman dissipated as I scurried towards my car with my new sock-mittens. What would have happened if I hadn’t thrown on the socks? Probably not much beyond dry chapped hands. But if you live in a cold area of the world, and your kids refuse to wear mittens (or socks) on their hands in this chilly weather… this post is for you:

***Three little kittens, they lost their mittens, and they began to cry.***

***Oh, mother dear, we sadly fear***

***That we have lost our mittens.***

***What! Lost your mittens, you naughty kittens!***

***Then you shall have no Xbox today.***

***-the modern version of a traditional poem***

It’s only January and already my kids’ mittens are missing some mates.

> Prolonged exposure to cold can lead to injury in body parts with relatively less blood flow such as the ears, fingers and toes. In frostbite, injury occurs secondary to ice crystals which form within or between the cells in your body. Injury can be so severe that the tissue dies and infection sets in.
> Early signs of frostbite include tingling or aching. Without treatment, the area will become pale and lose all sensation.

If you suspect your child's hands are  frostbitten, first remove all wet clothing. Rewarm the area by placing immediately in warm water. Think opposite of a burn- where you use cold water. Do not massage the hand as this may cause further injury, but do encourage your child to move his hands. As very cold hands warm up, they will become blotchy and painful or itchy. Ibuprofen (brand names Motrin and Advil)or acetaminophen (Tylenol) will be helpful. Warm for at least half an hour even if it is painful.

Signs of actual frostbite are blistering, numbness, or color changes. As my sister, an emergency room doctor says, red is good. Black and white are not.

Head over to the emergency room if you think your child has frostbite. To avoid the risk of over-heating and to manage the pain of treating frost bite, thawing for frost bite should be medically supervised. Just as you would seek care for a burn, seek medical care for a cold induced injury. To rewarm properly, the frostbitten part of the body should be submerged in warm 37-to-40 C (98 -to-104 F) water. No higher because then it's like trying to defrost a chicken. You will end up cooking rather than thawing the tissue, says my sister. Also a big no-no: starting to thaw but then not completing the thaw. Thaw-refreeze-thaw will injure tissue, same as it ruins a defrosting chicken. So again, seek medical attention for your child if you suspect frost bite has set in.

For an interesting but somewhat technical article with photographs on a case of frostbite, check out this New England Journal of Medicine article.

Naline Lai, MD with Julie Kardos, MD

© 2013 Two Peds in a Pod®

*modified from original post on 1/20/2010*