

## Children and Winter Weather

As Public Health Nurse, I am often asked many questions regarding children and winter weather. Some of these questions stem from “old wives’ tales” such as: becoming chilled causes “colds;” if you have a “cold”, you should not go outside; and young children shouldn’t be outside when the temperature is below 32°F.

These are myths that tend to keep parents and providers from allowing children to play outside. There are, however, many benefits from participation in outdoor winter activities. For example, indoor air become dry, stale, germ infested, and full of air pollutants causing increased respiratory ailments. The outdoor environment provides fresh, clean, and humidified air. An outdoor activity also allows children to exercise their large muscles which increase their circulation and adds color to their cheeks. The exercise increases their appetite, decreases stress and aggressiveness, and allows them to sleep better at naptime and bedtime. Direct sunshine on the skin produces Vitamin D necessary for bone growth. Another benefit of winter outdoor play is that children learn from exploring their environment, changed by the winter season and how to get dressed by themselves with winter clothing.

It is good for children (including babies and everyone else) to get outdoors for 2 or 3 hrs a day, particularly during the season when the house is heated. I would like to promote winter outdoor play on a daily basis as long as conditions aren’t extreme and children are dressed appropriately. Conditions to consider when children go outside and for how long include temperature, wind chill and precipitation. Listen to the daily weather report or refer to the national weather services wind-chill chart at: [www.nws.noaa.gov/om/windchill](http://www.nws.noaa.gov/om/windchill). If the temperature (including wind-chill is -20°F or below, you may want to keep children indoors. Above -20°F (including wind-chill) please use common sense. Try stepping outside yourself. For example, you may choose to stay inside on a windy, snow day even with a relatively high actual thermometer reading. However, on a very calm, sunny day with lower actual thermometer reading you will find it comfortable outside.

Children get cold more easily than adults. You will need to take extra care to keep your child warm and dry outside. Layers of protective clothing work better than a single thick layer, Warm air gets trapped close to the skin with layers, and if the child gets too warm, a layer can be removed. If you use long underwear, polypropylene is one of the best materials since it absorbs moisture and breathes. An appropriate next layer could be a turtle neck, sweater and long pants.

The final layer would be a snowsuit or a jacket and overalls. The outer layer should be wind resistant and water-repellant (water-proof materials do not breathe and can cause sweating). Ears are very vulnerable to frostbite and a great deal of heat is lost from the head, making caps or hats especially important. Hood are difficult to lose, but do not fit as snugly as hats. Generally, mittens are preferable to gloves for warmth. If the mittens aren’t waterproof, a second pair should be available. Dry clothes are a must. Scarves can be helpful to prevent chapped cheeks and to help the child breathe warmed air on very cold days. Last come the boots. These need to fit right. If they are too tight, they can decrease circulation, increasing the possibility of frostbite.

It is important to recognize the signs of frostbite. Frostbite is the freezing of body tissue and occurs most frequently on hands, fingers, cheeks, ears, nose and toes. The first sign include red skin and a tingling or burning sensation in the frostbitten area. (Children 3 years old and

younger may not be able to communicate this sensation to you). The second, more severe stage of frostbite is characterized by white, gray or yellowish patches on the skin. If the child has any of these symptoms, remove him/her from the cold immediately. To care for any of the frostbitten skin, warm the area slowly and gently by placing warm packs or soaking it in water no warmer than 105°F (lukewarm water). Never rub the area because it can cause damage to the soft tissue. Keep the frostbitten part in the water until it looks red and feels warm. If blisters are present, don't break them. Notify the parents if the area becomes swollen or if blisters are present. A child who has experienced frostbite will continue to be very sensitive to the cold and can experience tingling, loss of feeling, and pain during cold weather for many years.

Other elements to consider when playing outdoors are the sun and wind. If it is a sunny winter day, you may consider applying sunscreen to all exposed skin. Because the sun can reflect off the snow, it can cause sunburn to areas that normally aren't exposed to the sun such as under the chin. You may also consider placing a thin layer of petroleum jelly to all exposed skin to prevent chapping from the wind and wetness.

With the above information, we hope that you have a safe and healthy winter season and enjoy our winter weather in Minnesota.

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