

## Soccer in Cold Weather Part 2

In Part 1 we discussed: Factors that increase the risk of playing soccer in the cold weather; and a summary of symptoms and strategies to recognize and deal with cold injuries.

In this section we present practical tips to retain and generate heat to prevent cold injury and improve the comfort and performance of soccer players in cold weather.

- a. **Cover Up:** Exposed skin loses heat to the environment. Wind will remove heat even faster but worse still is to allow the skin to remain wet. Wear layers that wick away from the skin. Cotton absorbs moisture and keeps it close to the skin therefore is a bad material to wear on cold, wet or windy days. Polyester and polypropylene fabrics are lightweight and will wick moisture away from the body so any sweat produced does not lead to increased heat loss.
- b. **Gloves:** Gloves help retain heat and usually offer padding on the finger tips for additional grip. If you take throw-ins on cold days you know the extra challenge of controlling a throw with frozen fingers.
- c. **Headgear:** Wear a hat or touque for as long as possible on cold days. Some leagues will allow soft headgear to be worn on the field.
- d. **Goalkeepers:** Keepers generate less heat than other players and therefore need to layer up even more than the other players.
- e. **Hydrate:** Our bodies lose moisture even when playing in the cold. Rather than water loss through sweat, we lose it through breathing, Water is required to maintain all body functions, including heat retention so hydration in the cold is still important.
- f. **Carbohydrates:** When skin is exposed to the cold we use less fat and more glycogen for energy. The increased rate of glycogen leads to earlier fatigue and a less potential heat generation. A good carbohydrate rich meal a few hours before a match is especially important in cold weather. Players can also supplement extra carbohydrates by ingesting a sports drink (typically 6-8% carbohydrate, not more) before and during and after the warm-up and competition.
- g. **Vaseline:** On cold and/or wet days, apply a layer of vaseline on the toes, legs, body, ears, neck and cheeks. This layer makes a barrier to moisture and wind which allows players to retain more heat. This small tip will result in far greater comfort on the cold soccer pitch.
- h. **Stay Fit:** Unfit players will have less energy to expend on both soccer demands and heat production.
- i. **Acclimate:** Traveling teams should ideally allow 8 to 10 days of acclimation to get used to new cold climates.

Remember, human beings are better at dissipating heat than we are at retaining heat. Children are even more susceptible to cold weather than older players. These suggestions will help players to retain heat and have the energy to generate heat. The

combination of these two factors are the best protection against the cold challenges of soccer under inclement conditions.

Yours in Sport,

JR Justesen

JR is a physical therapist, a player, coach and father. He has worked in amateur and professional soccer and has also written a book on soccer safety available free of charge at [www.goal-tek.com](http://www.goal-tek.com). Articles are also available on the website [www.parkwayphysiotherapy.com](http://www.parkwayphysiotherapy.com)