Top 5 ways body heat is lost

1. **Evaporation** – Body heat turns sweat into vapor. Active work contributes to heat loss. To combat this, drink plenty of water and stay well hydrated.
2. **Convection** – Heat loss by air or water moving across the skin surface. When exposed to cold air, cover exposed skin and take shelter from the wind. The thicker the insulating clothing layer, the better it prevents convection.
3. **Conduction** – Direct contact with an object. For instance, sitting or lying on the cold ground removes heat from the body, until the ground and the body are the same temperature. The more dense the insulating barrier (think dense steel metal vs. a fluffy down pillow), typically the faster it can conduct heat. The thicker the barrier, the better.
4. **Radiation** – The body radiates (like a fire — you can feel heat without being inside the fire). Bodies can lose heat even in 70 degree weather. 40-45 percent of body heat is lost through the head and neck due to increased blood flow in comparison with the rest of the body. Combined with the wrists and ankles, this can approach 60 percent. These areas need to be covered!
5. **Respiration** – Air is warmed, then exhaled, resulting in a significant source of heat loss. Breathing through the nose helps warm the air as it enters the body and lungs slightly more than breathing through the mouth. A balaclava or similar type clothing can help retain moisture and warmth. Dry air speeds this process — when in cold air for prolonged periods, prehydrate and continue drinking plenty of warm fluids!