

# -Keeping Warm during Outdoor Activities-

## Why is staying warm important during outdoor activities?

- You will be more comfortable!
  - Serious heat loss can result in issues such as hypothermia and frostbite, which can be dangerous and even deadly.
    1. Hypothermia- a decrease in core body temperature which can lead to a disruption in normal body functioning
      - a. Causes: the most common causes of hypothermia is exposure to cold-weather conditions or cold water (95° or less). However any prolonged exposure to any environment colder than your body can lead to hypothermia
      - b. Signs and Symptoms: Shivering, exhaustion, confusion, memory loss, slurred speech, drowsiness.
      - c. Treatment: Move the person out of the cold, remove wet clothing, cover the person with blankets, make sure they are not sitting directly on the cold ground, monitor breathing, provide warm drinks, and use warm dry compresses.
    2. Frostbite- freezing of tissues
      - a. Usually fingers and toes get cold first, so make sure socks and gloves stay dry.
      - b. Treatment: Get the person to a warmer environment to re warm the frozen body part. If this is not possible, do not attempt to rewarm the body part if there is a chance it may freeze again.



# Four Main Ways Body Heat is Lost

## 1. Convection

- Loss of heat similar to conduction, except one of the objects is in motion
- ii. Example: wind chill

Body Heat Loss ↑ Cold Temperature \*



## 2. Conduction

- Loss of heat due to two objects in direct contact with one another
- Example: sitting directly on a snowbank
  - \*This heat transfer gets faster if the objects are wet (ex. Sitting with wet clothes), making staying dry extremely important in cold temperatures.

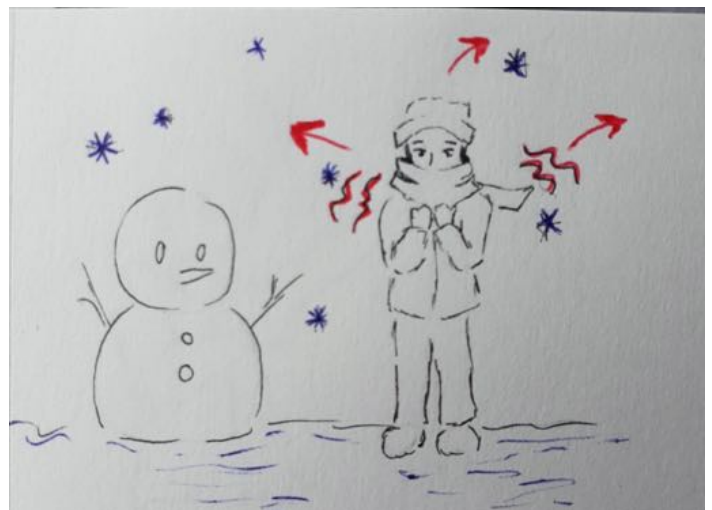


## 3. Evaporation

- Heat loss due to water changing from a liquid to a gas
- Example: sweating, respiration (exhaled air)

## 4. Radiation

- Loss of heat due to the environment's temperature difference
  - Example: someone outside in 15 degree weather while their body temperature is 98 degrees



## How do you stay warm during outdoor activities?

- Following these steps to keep warm can help prevent issues arising such as hypothermia and frostbite.
  - Prepare: wear appropriate clothing for an activity that will be in colder temperatures. Make sure everyone has enough water and food for the day.
  - Knowledge: be aware of the risks of getting cold, and what to do in case someone is experiencing complications from being cold
  - Assess: make sure during an outing that everyone is warm and dry. Remind people to put on more layers if they get cold, eat more food, or keep their body moving.

## Test your knowledge!

[https://docs.google.com/forms/d/e/1FAIpQLScQg-M7ZKhhwg9u955aoSXzCXdydaFFtFw\\_ALpOpqvKPfXQ/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLScQg-M7ZKhhwg9u955aoSXzCXdydaFFtFw_ALpOpqvKPfXQ/viewform?usp=sf_link)

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