



# Cotton Kills

Did you ever wonder why people say cotton kills?

## The Cooling Power of Water

Cotton garments absorb up to 27 times their weight in water.

This simple fact means that cotton garments:



- Actively work to cool your body in even moderate temperatures.
- Take forever to dry out

Cotton fiber is like a tiny tube. As individual cotton fibers grow on the plant, the inside of the 'tube' is filled with living cells. Once the cotton is picked and processed, these cells dry up leaving behind a hollow space within the cotton fiber. This empty space holds a lot of water.

Cotton can even get wet without exposing it to rain or submersion in water. Your own sweat will be soaked up by cotton. This can easily have the same results as if you fell into a lake.



## Insulation

Clothing keeps you warm by trapping warm air near your skin. When cotton gets wet, it ceases to insulate you because all of the air pockets in the fabric fill up with water. When you hike, you perspire, and any cotton clothing touching your skin will absorb your sweat like a sponge.

If the air is colder than your body temperature, you'll feel cold because your cotton clothing is saturated and is no longer providing any insulation. This can lead to disorientation, hypothermia, and potentially death if you become too chilled. Remember, hypothermia can occur in temperatures well above freezing and become serious if you get wet and chilled.

## Wicking

Wet cotton does not wick water away from your skin either. Wicking fabrics move water from wet areas to dry ones. Layering with wicking fabrics is an effective clothing strategy. Wicking fabrics move water away from your skin and up through your layers. This enables the fabric near your skin to trap insulating air and retain your body's warmth.

## Hypothermia

Hypothermia is a medical emergency that occurs when your body loses heat faster than it can produce heat, causing a dangerously low body temperature.

Your normal body temperature is around 98.6 F (37 C). Hypothermia occurs as your body temperature passes below 95 F (35 C).

Hypothermia causes many things in your body to stop working, but the most important is your heart. Your heart will stop working if your core temperature drops too low.



## Hikers and Hypothermia

Hikers encounter hypothermia more frequently than normal people. The weather can be quite damp or wet out on trails. Hikers need to be very focused on keeping their core body temperature at safe levels. Hikers are more likely to die of hypothermia in the spring, summer and fall than they are in the winter; during those months the odds that they'll be caught unprepared are higher.