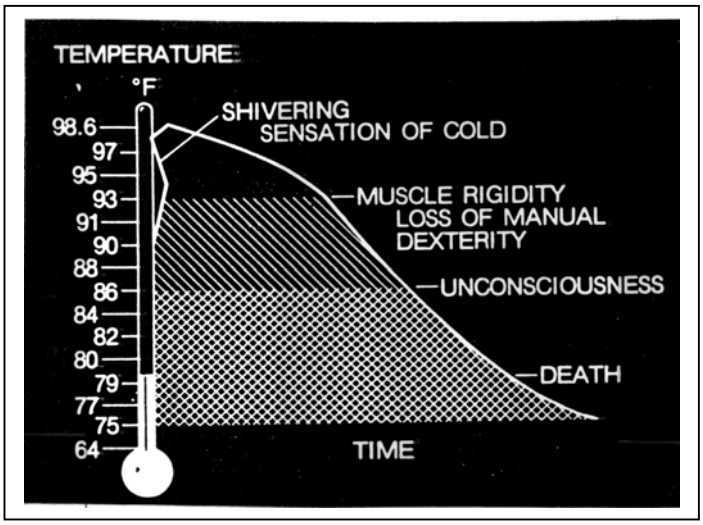
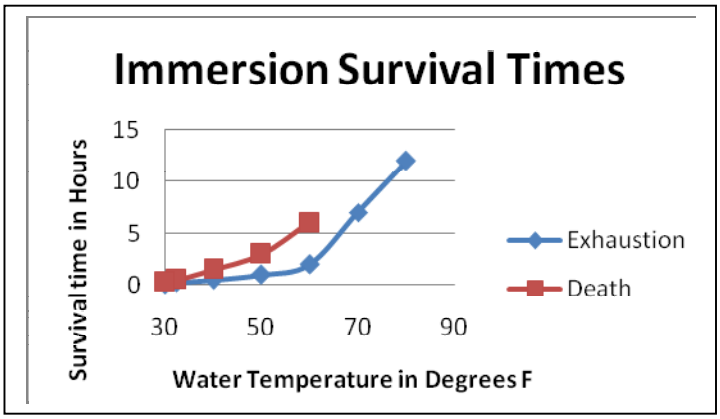
IMMERSION HYPOTHERMIA

Hypothermia is a subnormal (below normal 96.6° F) temperature in the body core. A person can fall victim to hypothermia anytime the temperature is below about 90° F, even during a summer rain storm. In fact, people are more likely to experience hypothermia in a fall or spring rain storm than in an extreme cold winter. Preparation is the key. In winter, you dress and are prepare for the cold. In that spring rain storm, people do not expect or are prepared for the loss of heat caused by the rain and the wet clothing.



The effects of a reduce body core temperature are shown in the chart to the right. Feeling cold, shivering, loss of mental function, trouble talking, trouble walking, trouble doing simple tasks, forgetfulness, irrational behavior (like taking off your gloves or clothes), unconsciousness and then death.

Immersion in cold water is potentially deadly. In fresh water with ice, the water temperature is around 35°F. At that temperature, a person will lose consciousness in about 20 minutes and, if they do not drown, will be dead in about one hour. See the plot to the left.



First Aid for Immersion Hypothermia Victims

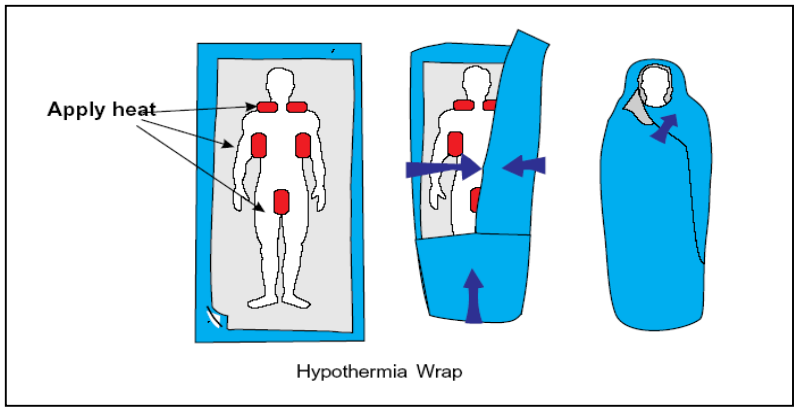
Rescue the victim. Get him out of the water as soon as possible using a technique **that** does not unduly endanger the rescuers. Have a plan and carry it out quickly and efficiently. Waste no time. Seconds count.

Make sure the victim has an open air way and is breathing. There is a danger of drowning symptoms as well as hypothermia.

Seek professional help. Send out for help. If you use a cell phone make sure you give your location as precisely as possible and make sure you provide you cell number for a call back, if necessary. Remember that a 911 call may not be answered by the closest emergency responder. **If you are calling, from the state forest preserve, call the DEC emergency dispatch number 518-891-0235.**

In the mean time, prevent further heat loss.

- Gently move the victim to a shelter area and warmth;
- Gently remove all the wet clothing – cut it away if necessary. The wet clothing accelerates heat loss.
- Get the victim into the shelter and into a sleeping bag or blankets. Add as much padding under the sleeping bag as possible. Use extra clothing, pads, sit-upons, etc. The hypothermia wrap is show to the right. Add heat by placing warm (if you cannot put and hold your hand in it, it is too hot) water bottles as shown. **You may use self-heating hand (glove) and foot (shoe) warmers, if available, but put them in a dry sock so the warmer does not come in direct contact with the victim's skin.** It is very important to warm the core and not the extremities. A fire is nice for warming the water and the rescuers but do not consider it as the primary source of heat for the victim.



Hypothermia Wrap

- If the victim is conscious, provide warm fluids. Sugary fluids like warm Tang would be good. DO NOT GIVE COFFEE, CAFFINATE BEVERAGES OR **ALCOHOL**. Also, high carbohydrate and sugary foods would be good.
- Treat the victim until professional help arrives.

If the victim is unconscious and unresponsive, continue to treat. Hypothermia victims can be in a state called a "metabolic icebox." The victim appears dead, no observable signs of respiration or pulse, but is still alive. Remember the climber on Mt. Everest who was abandoned for dead by his fellow climbers but walked into camp the next morning. Keep up treatment until a medical professional says otherwise.

Hypothermia victims are very susceptible to ventricular fibrillation. This can be initiated by physical jarring or rough handling. A victim is alive when placed on the rescue sled but is dead fifteen minutes into a bumpy ride. This is why it is important to keep the victim warm and stable until professional evacuation can be arranged. Do not allow the victim to walk. **CPR is not appropriate for a hypothermia victim as it will induce ventricular fibrillation**. Remember in unconscious hypothermia victim, you will not be able to determine if the victim is dead or alive.

Do not consider the victim as dead while cold in the field. Death can only be determined when the victim is warm in the hospital.

Your job is to maintain the victim until professional evacuation and medical help can be obtained.