Shivering occurs as body temperature drops from 97º F down to 90º F. Muscle rigidity and loss of mental capacity occurs at a core temperature of about 93º F. Unconsciousness occurs when the body's core temperature reaches about 86º F. Death occurs at about 80 F.

Once in the Water

Try to get back in or on your boat immediately.

Do not leave the boat. If you are not wearing thermal protection and can not get out of the water, stay as still as possible. Fold arms, cross legs, and float quietly on the buoyancy of your PFD until help arrives (Heat Escape Lessening Posture; H.E.L.P). If two or more people are in the water, put your arms around one another. If possible, attach a line to one another. Stay still and close together (Huddle posture).

Your ability to survive will depend on luck and how you prepared yourself before going out. If you dressed for the possibility of immersion wetsuit/dry suit & PFD), a rescue, with the help of your paddling partners, should not be difficult. Now your survival depends on the timely arrival of outside help!

Improve your odds—Dress to swim!

How Fast can it Happen?

On Memorial Day, 1996, two brothers (10 and 18-years-old) capsized their canoe in 50º F Adirondack lake water. They were being towed in high winds. The younger brother, wearing a PFD, was promptly rescued. Minutes later, the older brother, wearing blue jeans, a light shirt and no PFD, could not be found. His body was recovered by divers the next day. He was not able to hold on to the capsized canoe for even the few minutes it took to save his younger brother.

At least 3 kayaker deaths have occurred in the Chesapeake Bay area in 2006 that were related to cold water.

Cold Water Web Sites:

http://www.enter.net/~skimmer/coldwater.html
http://www.tc.gc.ca/marinesafety/TP/Tp13822/menu.htm
http://www.AtlanticKayakTours.com
(go to- Expert Center: Coldwater Safety)
http://www.acanet.org (go to SAFETY)

Brochure developed and provided by
Chesapeake Paddlers Association
P.O. Box 341
Greenbelt, MD. 20768

http://www.cpakayaker.com/
http://www.cpakayaker.com/forums/

Chesapeake Paddlers Association

Helping people safely enjoy sea kayaking within the Chesapeake Bay area and promoting safe paddling

It's STILL Cold in THERE!

Cold Water Safety Tips

Every Spring people die because the water doesn't warm up as fast as the air...

You could be in trouble in seconds! Sudden immersion in cold water from a capsize causes a "gasp" reflex which can immediately fill your lungs with water. Falling into cold water also causes **Cold Shock...** a sudden increase in heart rate and blood pressure...even cardiac arrest. All of this happens in a matter of seconds...before you have a chance to come up for that first breath of air!!

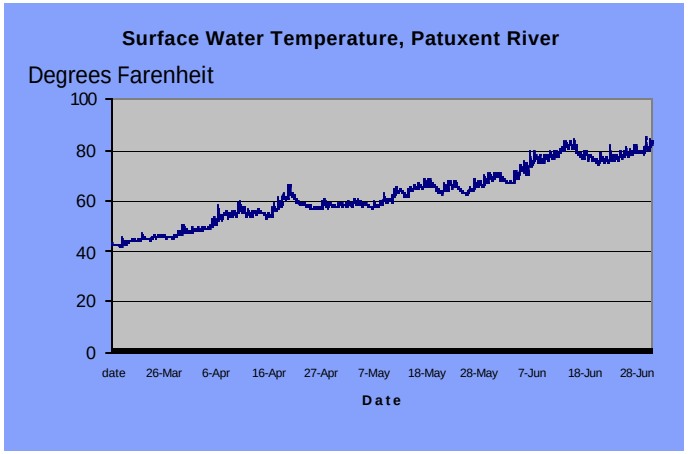
If you think the water is too cold to fall into the way you are dressed, then IT IS!

WHAT CAN YOU DO?

- Always know the water temperature before you set out.
- Never paddle alone in cold water.
- Always wear a wet or dry suit when the water temperature is below 65º F.
- Always wear a Personal Flotation Device (lifejacket) when paddling.
- Avoid cotton clothing when paddling in cool temperatures...it holds the water close to you skin.
- Take extra dry clothes in a water-tight bag in case you capsize.
- Fuel yourself with high carbohydrate foods and plenty of water.
- Paddle close to shore so you can get out fast and warm up.
- Learn about hypothermia and cold water safety

DRESS to SWIM, DRESS to LIVE

Even though the air temperature has warmed up nicely, the water temperature in the Chesapeake and it's tributaries doesn't reach **70º F until June**. If you capsize or fall in, you have a serious risk of cold shock or hypothermia that could endanger your LIFE!



What Happens in Cold Water?

Water removes heat from the body 25 times faster than cold air. About 50% of that heat loss occurs through the head and neck. Immersion in turbulent water or attempted swimming may double that rate of heat loss. Strong swimmers, without thermal protection, have died before swimming 100 yards in cold water. In water under 40º F, victims have died before swimming 100 feet. Immersion in cold water causes a series of traumatic responses that rapidly incapacitate and kill boaters who are not wearing protective clothing.

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Cold Shock

Immersion in cold water causes a powerful gasping reflex. If the victim is under water, due to lack of a PFD, water may be inhaled resulting in rapid drowning. Exposure of the head and chest to cold water causes sudden increases in heart rate and blood pressure, which may result in cardiac arrest. Uncontrolled rapid breathing (hyperventilation) follows the initial gasping response and may also lead to unconsciousness. The victim must attempt to recover a normal breathing rhythm as rapidly as possible.

Swimming Failure

Soon after entering cold water, hands, arms and legs become stiff and devoid of feeling. The victim rapidly looses the ability to swim, climb out of the water into an upright boat, or hold on to either a capsized boat or a life line thrown by a rescuer. Without a PFD, the victim drowns long before core hypothermia has developed.

Hypothermia

Hypothermia (reduced core body temperature) develops more slowly than the immediate effects of cold shock. Survival curves show that an adult dressed in average clothing and a PFD may remain conscious for 30 minutes at 40º F and perhaps 1 hour at 50º F in calm water. Turbulent water or swimming may cut that survival time in half. Without thermal protection, the victim is soon helpless. Without a PFD, drowning is unavoidable.