

Dangers of cold water

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As temperatures are creeping up more people are heading out to enjoy the waterways of Washington. Although the air temperature might be warm, many of Washington's waterways are still below 60 degrees. Cold water can kill you in less than a minute. It's actually so dangerous that it kills a lot of people within seconds. With very few exceptions, immersion in cold water is immediately life-threatening if you're not wearing thermal protection like a wetsuit or dry suit. Most cold water fatalities are drownings due to cold shock which causes an immediate loss of breathing control.

Even good swimmers can drown in cold water. Canoe and kayak paddlers have drowned immediately after capsizing, sometimes even before they could even exit their boats. To understand why cold water deaths occur, you need to be familiar with the four stages of cold water immersion:

Stage 1: Cold Shock: The sudden lowering of skin temperature on immersion in cold water represents one of the most profound stimuli that the body can encounter.

Stage 2: Physical Incapacitation: When your muscles and nerves get cold enough, they simply stop working. This loss of muscle strength and control can happen very quickly. In very cold water, it's possible to lose the use of your hands in under a minute.

Stage 3: Hypothermia: Hypothermia means low body temperature, clinically defined as a core temperature below 95F. It takes about thirty minutes for an adult to develop hypothermia. You have to survive both cold shock and incapacitation before hypothermia becomes an issue.

Stage 4: Circumrescue Collapse: This can occur just before rescue, during rescue as the victim is removed from the water, and after rescue when the person is out of the water. It is not well understood, but appears to be related to an abrupt drop in blood pressure that can cause unconsciousness and also heart failure.

For more information on cold water shock and educational materials, visit <http://www.coldwatersafety.org>.

Prior Hospital Happenings available at <http://www.fcphd.org/news.html>.

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