

There was also some research done by the British Navy and others which determined that fat people last longer in cold water.

The reason little has been studied on cold-water survival is probably because "to find out what causes faster or slower deaths in cold water people must be cooled significantly".

Results of experiments

Basically they have found that:

— Even though submersion in cold water causes intense shivering, "you don't die from cold skin, cold hands or cold limbs". The skin and outer fat cool very rapidly, but it takes ten to 15 minutes before the temperatures of the heart and brain begin to cool.

— Contrary to the belief that a person lasts only about half-an-hour in 10 degrees C water, findings definitely show that the average-sized male can last two-and-a-half to three hours before the heart fails from a body temperature dropping from 38 degrees C to 30. Although women usually possess slightly more fat than men, they cool about 15 percent faster owing to their smaller body size. Children cool much faster.

— In 10 degrees C water, a person should not try to swim unless he is within a mile of shore. Results show that the average person swimming in a life-jacket cools 35 percent faster than he does when holding still and would only cover 0.85 miles before being overcome by hypothermia.

— The fastest way to die from hypothermia is "drownproofing", a method whereby a person floats quietly just under the surface, raising the head for breathing every ten to 15 seconds. In this position, a person cools 82 percent faster, mainly because his head, a high heat-loss area, is in the water. Contrary to what well-meaning swimming experts might recommend, this method should only be used in tropical waters.

— Treading water is as fatal as trying to swim. The cooling rate is 34 percent faster.

— Alcohol increases the body cooling rate about 20 per cent.

— In a small percentage of cases, sudden immersion in cold water can cause a heart attack or ruptured blood vessels. Cold shock can also cause hyperventilation, making even an expert swimmer take in water and drown. Wearing the UVic thermofloat jacket

would reduce the impact of the immediate shock.

— The warmer the water the longer the life expectancy. For example, an average male wearing a regulation life-jacket and holding still, will survive for about two hours at 5 degrees C, three hours at 10 degrees, five hours at 15, and 12 hours at 20.

Survival methods

Based on their findings, the UVic scientists have come up with two methods that will extend survival time. One is the HELP (Heat Escape Lessening Posture), which will increase survival time by 50 per cent. This involves holding the arms tight against the sides of the chest, a major heat-loss area, and raising the thighs to protect the groin, another major heat-loss area. If more than one person is in cold water, a "huddle" position is recommended, whereby the survivors cling together, making sure they are pressing the sides of their chests together. This also increases survival time by 50 per cent.

(Story and photos by Bryan McGill, University of Victoria Public Relations Office.)

UN crime conference to meet in Canada

When Canada is host to the fifth United Nations Congress on Crime and the Treatment of Offenders in Toronto from September 1 to 12, up to 3,000 delegates from 132 countries could be present. This would be double the attendance figure at the last quinquennial congress in Kyoto, Japan.

Topics on the agenda are: Changes in forms and dimensions of criminality — transnational and national; the role of criminal legislation, judicial procedures and social controls in crime prevention; emerging roles of the police and other law enforcement agencies; treatment of prisoners, with special reference to the Standard Minimum Rules of the UN; and economic and social consequences of crime.

The agenda, which has been approved by the General Assembly's secretariat, will also include visits to Canadian crime-prevention services and correctional institutions, film shows and an exhibition.

Rise in pension payments

Increases in Old Age Security Pension and Guaranteed Income Supplement payments, became effective April 1; the increases represent the sixth quarterly escalation based on the cost of living, as provided for in the OAS Act.

The new monthly total at the single rate for persons receiving both the basic Old Age Security pension and maximum Guaranteed Income Supplement is \$209.99; for a married couple, both pensioners, the combination of the basic pension and maximum supplement provide a payment of \$400.60 for the couple monthly.

The basic Old Age Security pension rose to \$123.42 from \$120.06; the maximum Guaranteed Income Supplement for a single person, or a married person whose spouse is not a pensioner, increased to \$86.57 from \$84.21; the maximum supplement for a married couple, both pensioners, increased to \$76.88 each from \$74.79. Added to the basic pension, this gives each married pensioner \$200.30 monthly.

Veterans pensions

War Veterans Allowances and Civilian War Pensions and Allowances also increased on April 1, affecting about 86,500 Canadians. The income ceilings are 2.8 percent higher than those in effect during the first quarter of the year.

The annual income ceiling under which single persons may receive maximum benefits has been raised from \$2,753.76 to \$2,830.92. For the married veteran it has been increased from \$4,714.32 to \$4,846.32; in the case of a married veteran with two children the income ceiling has increased from \$5,945.52 to \$6,112.28.

A single veteran, widow or widower receiving the maximum benefits receives \$6.43 a month more; a married veteran, \$11 a month more; and the allowance for each dependent child is increased by \$1.44 a month.

New maximum benefits are: single recipient, \$195.91 a month; married veteran, \$333.86; dependent child, \$52.74.

The scale of benefits is subject to the total annual income of a recipient. Allowances paid in respect of children take into account any Family Allowance payments.