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Risks of inland wild water swimming

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Aim: Wild water swimming in lakes, resevoirs, rivers and canals is becoming increasingly popular with both adults and adolescents, particularly with Covid restrictions limiting swimming pool use. A literature review was conducted to look at the risks of this activity.

Results: There were few relevant studies in the medical literature, although there were many educational articles in the media, outlining potential hazards. Although the number of accidental drowning deaths in the UK has fallen over recent years, there has been an increase in inland downing with over 150 deaths per year. There are more inland drownings than costal drownings. Drowning is a male dominated issue, with a ratio of seven males to one female, and many victims are teenagers. Individuals with alcohol or drugs in their system are at increased risk. Unregulated environment with varying conditions - spots that are safe for swimming one day may be treacherous the next Cold water and hypothermia – swimming in cold water reduces body heat, reduces swimming ability and impairs judgement. Reduced swimming capability is the major cause of drowning, particularly in lakes where swimmers may attempt to reach the other side but be unable to do so.

Cold-shock – a series of cardio-respiratory responses occur as body enters very cold water, particularly when diving into deep water. Effects are potentially fatal. Weeds – common in slow, warm lowland rivers and lakes and have the potential to entangle a swimmer's legs. This may result in a panic reaction with subsequent drowning. Currents - if unable to swim upstream against the flow of water in a river, a swimmer will be unable to get back to their entry point and may struggle to get out of the water due to downstream obstructions. Identifying an exit point before getting into the water is important. Currents can be especially powerful directly under large waterfalls or weirs, with water flowing in two directions with breaking waves and the potential for rip-tides developing, which may be dangerous.

Jumping and diving – water depth may vary and there may be underwater obstructions such as rocks, fallen trees, or rubbish which may trap swimmers or be hazardous to land on. Undercurrents directly below large waterfalls or weirs may hold swimmers underwater, which may prove fatal. Skin rashes - cercarial dermatitis may occur as a result of contact with small snails that live on the reeds around marshy lakes and stagnant ponds. It may cause intense itching but does not require specific treatment. Blue–green algae, found in lowland lakes may multiply after warm wet weather, with 'blooms' collecting which may cause irritation of the eyes and skin. Leptospirosis – Weil's disease may occur as a result of swimming in a river, canal or lake that contains urine from infected rats. Open wounds should be covered and eyes, nose and mouth should be kept out of the water as much as possible. If flu or jaundice occurs after swimming in high risk water, investigations for leptospirosis should be undertaken. If untreated Weil's disease may be fatal.

Conclusion: The risk profiles of wild water swims vary. Some warm shallow lakes and river pools are quite warm in the summer, with still water and are relatively safe. Other waters may be very cold and have strong currents. Individuals should be free to swim wild, but should make a 'risk assessment', each time they go swimming. Both adolsecents and adults should be advised of the potential risks and taught some basic rescue skills, to help reduce the number of lives lost unnecessarily to water.

Biography

George Guiton is an F2 Doctor in Dorset County Hospital NHS Foundation Trust, United Kingdom.