

# Sudden Cardiac Death and Cold Water Swimming - Essential Safety Information

Cold water swimming has many reported benefits, it is not however without risk. For cold water swimming events the two main dangers are cardiac arrhythmias causing cardiac arrest from cold water immersion and swim failure from rapid onset hypothermia affecting muscle function.

Professor Mike Tipton from Portsmouth University Extreme Environments laboratory writes: 'Cold water shock is one of the biggest stresses that you can place the body under. Cold water kills and it kills quickly.'

It can occur in temperatures of under 15°C. Studies carried out by Mike and colleagues in Portsmouth and at King's College London highlight a particular risk for those who put their face in the water. The body's automatic response to going under – holding your breath – can conflict with the body's cold shock response, which does the opposite. This causes the heart to go into abnormal rhythms, which can lead to sudden death.

Whilst full medicals and ECGs are not required for this event you must inform the event medics if you have any of the following risk factors:

- High blood pressure
- High Cholesterol
- BMI over 30
- Family history of heart disease or stroke
- Significant stress
- Sleep apnoea
- Current viral infection
- Taking any medication including over the counter or recreational drugs or herbal remedies.

The effects of cold shock can be reduced by disrobing with enough time for the skin to cool before entering the water and by ensuring that you concentrate on exhaling as you enter the water

Swim failure occurs when the muscles cool to such an extent that they are unable to work properly. It is for this reason that there are observers at ice swimming events who will terminate your swim for your own safety if you are showing signs of deterioration in your swim stroke.

I have read and understood the information above. I understand the risks of cold water swimming and declare that I have no additional risk factors as detailed above.