



## Cold Water Shock – the Facts

The term ‘cold water shock’ refers to a range of natural reactions that our bodies take to protect us when we enter cold water (although these reactions can sometimes work against us).

With cold water being anything from approximately the temperature of a swimming pool and below, we are not just talking about icy cold water here.

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### So what are the effects of Cold Water Shock?

There are three stages that your body goes through during cold water shock, starting with one that you will be familiar with a mild version of from getting into the swimming pool...a gasp for breath, this is then followed by rapid breathing (hyperventilation).

At the same time as your breathing goes out of control, your blood pressure shoots up as your body tries to keep your blood warm by moving it towards the middle of your body (this is why you go pale when you're cold).

Once your breathing is back under control, this is your window to get out of the water before the further effects of cold water shock kick in.

As your muscles cool, your strength, endurance and muscle control reduces to the point when you can't swim any longer so can't rescue yourself. The point at which you can't swim any more is called ‘swim failure’, and if you haven't got out of the water or managed to get hold of a buoyancy aid (like a lifejacket) by this time, you will drown.

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## What about hypothermia?

There is a lot of talk of people dying from hypothermia after falling into cold water, but the truth is that unless they have a way of surviving past the point of swim failure (like wearing a lifejacket), you will drown before you become hypothermic.

Even in really cold water, it takes at least 30 minutes for you to become hypothermic. Crucially, hypothermia remains a risk even when you get out of the water unless you get out of the cold and warm up efficiently and quickly.

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## Is cold water shock really responsible for lots of drownings?

It is difficult to identify if cold water shock was the cause of a drowning or not, but this is what we know:

1. All waters around the UK are cold enough to induce the cold shock effects, even in high summer.
  2. Over 60% of drownings are of people who have ended up in the water by accident, so they're normally very close to the edge, but something stops them from being able to get out safely.
  3. A sudden rise in blood pressure can be fatal for people with a pre-existing heart condition. Each year a number of people who are suspected of drowning, turn out to have had a heart attack.
  4. Studies show that people's ability to swim in cold water is much less than their ability in a warm swimming pool.
  5. Survivors of drowning have described how the effects of cold water shock made it difficult for them to survive.
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## What should you do if you fall into the water?

**First**, keep your mouth away from the water until you have your breathing back under control, you can do this by rolling onto your back and floating or paddling to stay at the surface.

**Then**, don't waste any time and swim towards an exit before your muscles start to cool, or swim towards something that will help you to stay afloat whilst you are calling for help.

**Finally**, once you are out of the water re-warm yourself as soon as you can to avoid hypothermia.

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