

Summer Week 1 - PSHE

Lesson 2

Can I understand what cold water shock is and how to treat it?

Last lesson we looked at the dangers of open water. The temperature of the water was mentioned as one of the dangers to be wary of.

The water temperature can cause something known as Cold Water Shock.

Cold water shock

The effect on the body of entering water 15°C and below is often underestimated. This shock can be the precursor to drowning.

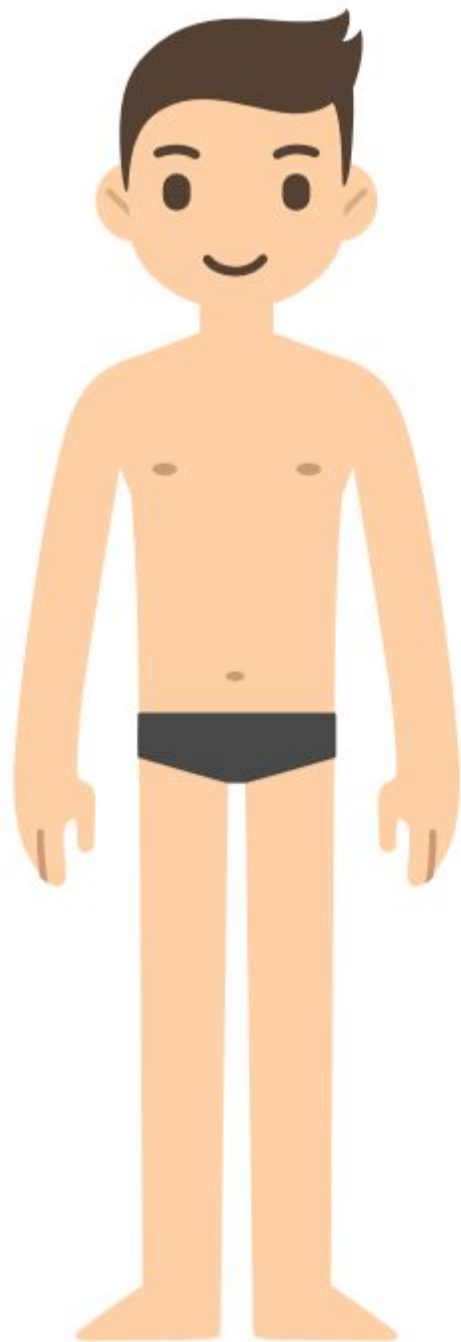
What's the risk?

Anything below 15°C is defined as cold water and can seriously affect your breathing and movement, so the risk is significant most of the year.

Average UK and Ireland sea temperatures are just 12°C. Rivers such as the Thames are colder - even in the summer.

What happens?

- Cold water shock causes the blood vessels in the skin to close, which makes it harder for blood to flow.
- Heart rate increases. As a result the heart has to work harder and your blood pressure goes up. This can cause a heart attack even in people who are young and healthy.
- The sudden cooling of the skin by cold water causes a deep involuntary breath. Breathing rates can change uncontrollably and you could be breathing much quicker. This change in breathing can cause panic, increasing the chance of inhaling water directly into the lungs. This can all happen very quickly: it only takes half a pint of sea water to enter the lungs for a fully grown man to start drowning. You could die if you don't get medical care immediately.



Skin temperature drops

Heart rate increases

**Lose control of your breathing
and ability to hold your breath**

**Muscles cool down, affecting
movement and swimming ability**

How can you minimise the risk?

If you enter the water unexpectedly:

- Take a minute. The initial effects of cold water pass in less than a minute so don't try to swim straight away.
- Relax and float on your back to catch your breath. Try to get hold of something that will help you float.
- Keep calm then call for help or swim for safety if you're able.

If you're planning on enjoying the water:

- Check conditions - including water temperature - before heading to the coast.
- Wear a wetsuit of appropriate thickness for the amount of time you plan to spend in the water and the type of activity you're doing, if entering.
- Wear a flotation device. It greatly increases your chances of making it through the initial shock.

A photograph of a person floating in the water, with only their head and shoulders visible above the surface. The person is looking towards the right. The background shows a clear blue sky and a dark, rocky coastline with some orange-brown patches. The water is dark and calm.

If you fall into the water...

Float for a couple of minutes or until you feel calm.

The initial shock of being in cold water can cause you to gasp and panic.



Don't try to swim straight away. The effects of cold water shock pass in couple of minutes. Instead,

Relax and float

on your back while you take control of your breathing.

Try to grab hold of something that will help you float.

**When you are calm, raise your arm and shout for help.
Swim for safety if you can.**



This video talks about Cold Water Shock

<https://rnli.org/news-and-media/2017/may/25/rnli-respect-the-water-2017-video-news-feature>



Respect the Water 2017 Video News Feature, including: Soundbites from Professor Mike Tipton (cold water survival expert) and demonstration of the 'floating' survival technique.

Your task

Over these PSHE lessons we have been exploring water safety outside the home. By the end of the unit you will have created a collaborative poster showing important elements of all the two lessons.

It is up to you how you present this poster overall. You could place pieces of paper together. You could fold the paper into halves. Remember to highlight the key information for each section.

Today's task

Create the part of your poster which explains how to recover and manage cold water shock. There is a support sheet to help you if you need it.