



SWIM WALES®
NOFIO CYMRU



OPEN WATER SWIMMER GUIDANCE

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Open water swimming can include rivers, lakes, natural pools, lochs and the sea. There is a big difference between swimming in a pool and swimming outdoors and there is an even higher risk of drowning when swimming in the sea.

If you do decide to go open water swimming, we recommend the following:

- Never swim alone: Always go with someone else to a familiar spot.
- Always check the weather forecast, including tide information and wave height.
- If in doubt, stay out: There is always another day to go for a swim.
- Take plenty of warm clothes for before and after your dip, along with a hot drink to help you warm up again when you come out of the water.
- Wearing a wetsuit will help increase your buoyancy and reduce the chances of suffering cold water shock.
- Be seen: Wear a brightly coloured swim cap and consider using a tow float but should not be relied upon.
- Acclimatise to the water temperature slowly and never jump straight in.
- Stay in your depth and know your limits.
- If you get into trouble remember float to live by leaning back in the water, extending your arms and legs, and resisting the urge to thrash around to gain control of your breathing.
- Take a mobile phone in a waterproof pouch.
- If you or someone else is in trouble call 999 or 112 and ask for the Coastguard.





PRE-SWIMMING

SHOULD YOU SWIM?

It is your responsibility that you are sufficiently fit and healthy to participate in open water swimming. You should think about any pre-existing medical conditions that you may have and if you are in any doubt, we recommend that you do not swim.

WHERE TO SWIM?

If you decide to swim in open water that is not operated or supervised, then you should carefully plan the location based on the following:

- Check out local knowledge and advice.
- Make sure you have permission to swim at your chosen spot if required.
- Look out for safety signs and online information/feedback.
- Avoid weirs, locks and other structures.
- If a sign says “no swimming” and/or “danger” don’t swim there.
- Think about the water quality: Is the water potentially polluted (e.g. looks dirty, is a strange colour or smells) or does it have any pipes running into it.
- Don’t swim in stagnant water.
- Think about water temperature and the weather, as outlined below.
- Be aware of tides and currents. A strong current can easily prevent you reaching where you want to swim, or it could pull you away from your planned exit point.
- Be aware of hidden dangers under the water such as rocks.

PRE-SWIMMING

EQUIPMENT

Wetsuits provide insulation against the cold, improving cold water tolerance and extending the time a swimmer can remain comfortably in the water. They can also increase buoyancy so that, even when static, swimmers float. These two qualities can help build confidence in swimmers but only if the wetsuit fits well.

Poorly fitting wetsuits are a common source of stress and anxiety, particularly for swimmers who are new to open water swimming. If wetsuits are too tight, they can restrict movement and breathing to a point where the swimmer may unzip the suit for relief, causing it to flood with water. If they are not tight enough, they will also flood with water. In both these cases drag is increased making swimming far more difficult as well as compromising the insulating properties of the wetsuit.

The main things to check when you put on your wetsuit are:

- That the wetsuit fits correctly, particularly around the neck where a good seal helps prevent excess water entering the suit.
- There is a comfortable fit from crotch to shoulder so that arm reach and flexibility are not restricted.
- There is correct length in the arms and legs without excess material being gathered up that will increase drag.
- The wetsuit is not being worn back to front.

WORLD AQUATICS OPEN WATER SWIMMING RULES

WATER TEMPERATURE	WETSUIT
Below 15.9°C	Swimmers should not be competing
Between 16°C and 17.9°C	Wetsuits are compulsory
Between 18°C 19.9°C	Swimmer can wear a wetsuit or not
20°C and above	No wetsuit

BRITISH TRIATHLON COMPETITION RULES

SWIM LENGTH	FORBIDDEN ABOVE	MANDATORY BELOW*
Up to 1500m	22°C	14°C
1501-3000m	23°C	15°C
3001-400m	24°C	16°C

*when mandatory, the wetsuit must cover at least the torso.

Goggles are recommended as they allow you to see underwater obstructions. A brightly coloured swim cap again can help with being seen, which can be important if there are boats passing by. Ensure you take a towel, warm clothes (including hat and gloves) and a hot drink for after your swim. See the post-swim section below. When open water swimming, cover cuts and abrasions, however minor, with sticking plasters. Don't swim if you have deep cuts or open wounds as the infection risk is higher, including the risk of contracting weil's disease.

PRE-SWIMMING

WEATHER CONDITIONS AND WATER TEMPERATURE

Different types of weather can lead to additional risks that you need to be aware of. In hot weather, there can be a significant difference between the air and water temperature. Strong winds can also make swimming conditions difficult as the water can become unsettled and with the added wind chill you may get colder than you expect. You should never swim if there is any danger of an electrical storm. We advise only swimming when the weather is suitable and calm.

The temperature of the water is a major factor in the safety of swimmers. Temperatures both high and low can have serious effects on the swimmer and therefore recommendations for both maximum and minimum temperatures are explained. We recommend that all open water swimming should take place in water at 11°C or above. At temperatures lower than this swimmers are at greater risk of experiencing cold water shock.

HYPOTHERMIA

Hypothermia is a potentially fatal condition that occurs when the core body temperature falls below 35°C. The effects of the cold on the body are more significant in swimmers as the water acts as a major conductor of heat from the body and the effects of hypothermia can be accelerated when submerged in water. Heat conductance is 26 times greater in water than in the air, therefore the speed with which the human body cool to dangerous levels is far more rapid.

OVERHEATING

Whilst it is comfortable to bathe in warm water, performing vigorous exercise is very different. The human body reacts to the ambient temperature surrounding it, and in higher temperatures it tries to sweat to maintain a core temperature of around 37°C. When the water temperature is high sweating becomes ineffective and the core temperature begins to rise resulting in the heart rate increasing. When vigorous exercise is factored in the equation the body temperature can raise to such a level that symptoms such as heat exhaustion and heat stroke can occur often leading to unconsciousness. In water this can be fatal unless a rescue is affected immediately.

A human body suffers heat stroke when the body temperature rises so high that it overheats the brain, causing unconsciousness. The higher the intensity of the exercise, the higher the body temperature can rise resulting in the circulatory system having to work very hard to keep the body from overheating. During exercise, not only must the heart work harder to pump oxygen from the blood in the lungs to the muscles, it must also pump heat in the blood from the muscles to the skin where the body perspires and it evaporates to cool the body off.

Several factors increase the chances of a swimmer developing heat stroke such as when the outside temperature and humidity are high, the swimmer is unfit, takes certain medication, sick or is dehydrated. To protect swimmers from heat stroke when open water swimming, they should start out slowly and gradually increase their pace. This gives the body time to circulate the heat to the skin where heat can be dissipated; this is much more difficult in hot water than hot air. Swimmers should also drink plenty of fluids.

WHILST SWIMMING

ENTRY AND EXIT

Planning your entry to and exit out of the water prior to swimming is vital. You need to be able to enter the water slowly in a safe way that allows you to acclimatise to the water temperature, do not jump in. You need to be able to give yourself the opportunity to get used to the water temperature and regulate your breathing close to your water entry point in case you panic and need to exit.

When open water swimming, the colder the water and air temperature is, the quicker you will cool down and therefore it is advised that you should spend less time in the water. It is important to consider underfoot conditions leading to your entry point to avoid risks of cuts and grazes. Try to wear shoes as close as possible to the water's edge and look out for sharp stones or broken glass.

To acclimatise we recommend that you:

- Immerse yourself slowly.
- Put your face in the water.
- Take some deep breaths.
- Gently tread water slowly moving your legs and arms.
- If you become nervous or uncomfortable, it is recommended that you roll on to your back and float and breathe deeply until you regain control. Your wetsuit and your tow float will help keep you buoyant but should not be relied upon.

Prior to entering the water for the first time you should plan your exit point. You should ensure you can easily exit the water prior to entry and make sure you have access to your towel and warm clothing quickly upon exiting the water. Remember to take into account currents and tides.

SWIM COURSE

When planning your entry and exit point, you also need to plan your swim course and route.

Take into consideration:

- How long you plan to swim for. Limit your time in the water if the temperature is close to 11°C and stop before you get cold.
- Your experience as an open water swimmer. You will fatigue, and this can affect your ability to hold your swim stroke technique. You may also cramp, if this happens roll onto your back. This will help you float, then relax and wait until you recover.
- Your cold water acclimatisation/previous experience of swimming in cold water
- Your health and whether you have any pre-existing conditions that may affect your ability to cope with the open water swimming environment.
- Where possible swim along the shoreline and as close to the bank as safe to do so.
- If you get into difficulty in the water, don't panic, stay calm and float on to your back until you can control your breathing and then continue to swim once again.

POST SWIM

RECOVERY, REHEAT PLAN AND NUTRITION

Once you have finished swimming and exited the water, you need to dry off and dress immediately. Depending on the weather and time of year, it is advisable to put on warm clothes, including a hat and gloves. This is to reduce the risk of you suffering from the “after drop”, which is the lowering of your core temperature.

In warm weather, if you are feeling hot, you may need to sit in the shallows (if possible) before exiting to help reduce your body temperature.

If possible, it is advised to get into a sheltered spot so you are protected from any wind or chill. It is also advisable to have a hot drink as soon as possible after swimming as this will help to maintain body temperature. You may also be low on energy so refuel with something sugary too. Before you eat or drink, wash hands using sterilizing wipes or gels.

CLEANING YOURSELF AND EQUIPMENT

When you return home shower in fresh water in the earliest opportunity and again put on lots of warm clothes. This will remove all microbes, many of which are able to survive on the skin surface for long periods.

Rinse and wash all your kit in fresh water before drying thoroughly – including wetsuit, goggles, tow float and swimming costume.

If you feel ill seek medical advice by calling 111. This includes rashes for up to three weeks following your swim. Highlight that you have been swimming in open water and tell the operator the location that you swam in.

LEAVE IT AS YOU FOUND IT

Many of the places that you may open water swim in are beautiful locations and we want to keep them that way. Ensure you take all your belongings and leave the location as you found it. Take any litter with you and dispose when back at home

