



Group Safety at Water Margins

This document is about activities that take place near the water or just in it, such as: walking along a riverbank or seashore; cycling along a canal towpath; field studies near water, collecting samples from ponds and streams; beachcombing; paddling or walking in shallow water.

It does **not** cover swimming, surfing or watersports activities such as the use of water-going craft. It is relevant to activities such as fishing, gorge walking, ghyll scrambling and coasteering, but does not cover many of the specialist factors involved in them. For advice about such activities, see OEAP National Guidance document <u>7a "Adventure Activities"</u>.

Water margins provide wonderful opportunities for learning, play, enjoyment and challenge. However, they can have serious hazards which require careful management, even during the most benign activities.

The best way to help young people to be safe around water is to teach them to swim, and for them to learn (through guided and supervised first-hand experience) to identify water hazards and safe practices near them. Whatever your reason for going, having a clear purpose and plan will help your group to get the most from the activity – and will help to maintain safety.

If you are planning for participants to enter the water, you should also read OEAP National Guidance document <u>70 "Natural Water Bathing"</u>.

Risk Management at the Water Margins

Before the activity, you must identify any significant hazards at the activity site, and plan how you will manage the risks they pose. See OEAP National Guidance documents <u>4.3f "Risk Management – Some Practical Advice"</u> and <u>4.1a "Avoiding Accidents and Emergencies"</u>.

It is good practice to make a pre-visit to the site before you go there with a group. Having a competent person with you on a pre-visit may help you to identify hazards and assist you if you get into difficulty.

However, it is important not to allow familiarity with an area to lead to complacency. Water conditions can change dramatically. You may think you know a particular area well, but then be caught out when heavy rain causes a river to flood or a stream that is normally benign to become a dangerous raging torrent, or when a spring tide or a storm surge brings the sea much higher than normal. **Because it was safe last time, does not mean it is safe this time!**

Page 2 of 7

Take heed of any safety notices, and consider seeking local advice. For example:

- You could consult the coastguard or lifeguard service about tides, rip currents, quicksand and other hazards;
- You should observe instructions given by signs or flags which warn of hazards and designate zones for different activities;
- You could consult local people about whether there have been recent changes in an area, or what happens to water levels after heavy rainfall or in strong winds.

You should beware of steeply shelving shingle beaches, where one step could be the difference between someone paddling and being out of their depth.

If there is a possibility that someone could fall in, get swept away from the bank or shore, or otherwise end up in the water, you should consider how you would rescue them, remembering that sudden and unexpected immersion in cold water has a rapid and dramatic effect on the body's systems and will impair people's ability to reach safety:

- Could you get them out by reaching with a towel, a stick, a piece of clothing, or any public safety equipment that is available?
- Could you wade in to get them without putting yourself in danger?
- Is it possible that a swimming rescue may be required, and if so do you have the required training and competence?
- If you are competent in the use of throwlines you could decide to take one with you, but having a throwline is not a reason to take a risk.

Consider whether participants and leaders should wear protective equipment such as personal floatation devices or helmets. Usually, any activity that requires such equipment should be regarded as an adventure activity (see above).

Check what lies downstream from your planned activity site. Hazards such as a fallen tree, a fence, a weir, a waterfall or a pothole could be very dangerous if someone lost their footing or fell in and were swept downstream. If you are not happy with the location, look for a safer one.

If you do plan for participants to enter the water, they must be able to get in and out easily – consider access and egress points, the steepness of the slope, the slipperiness of the ground, the depth of any mud, and the vegetation.

Check for any underwater hazards such as rocks, roots or wire which could trap feet, sharp stones or broken glass which could cut, slippery rocks, deep mud, quicksand or strong currents. Remember that moving water above knee depth may cause loss of footing.

If fishing, check for overhead electric cables in the vicinity.

Water Quality

Water quality can be affected by many factors such as

- Drainage run-off into a river or canal of oil or chemicals from roads or farmland;
- A sewage outfall;

- A dead animal in the water upstream;
- Algal blooms.

Look for any obvious signs such as cloudiness in the water, unpleasant odours, froth on the surface, or dead fish.

Even if it appears clean, you should not allow anyone to drink water from a stream, river, lake or canal without boiling or treating it first.

Algal blooms and decomposing seaweed

Algae occur naturally in inland waters such as rivers, streams, lakes and canals, and in the sea. In certain conditions, such as after a period of warm weather with little rainfall, an algal bloom can occur. During a bloom, the water becomes less clear and may look green, blue-green or greenish-brown. A scum can form, which in freshwater may look like paint, mousse or small clumps, and in the sea may look like a brown froth which often blows onto the shore.

Blue-green algae, which occur in inland waters, and some other algal blooms that occur in the sea but are rare in the UK, can be lethal to animals and toxic to humans, producing rashes after skin contact and illness if swallowed.

It is not possible to tell whether a particular type of algae is dangerous just by looking at it, so it is best to not enter the water if you suspect that there is algae.

You should report any algal bloom you see to the Environment Agency. See www.gov.uk/government/publications/algal-blooms-advice-for-the-public-and-landowners

Occasionally large accumulations of decomposing seaweed can produce quantities of hydrogen sulphide gas, which smells of rotten eggs. This can be dangerous and should be avoided.

Weil's Disease

Weil's Disease, also known as leptospirosis, is passed on in the urine of infected animals. Although it is rare in the UK, it can be picked up if soil, or water from a river, canal or lake, gets into the mouth, eyes or a cut.

You should:

- Avoid water that may be contaminated with animal urine;
- Cover any cuts or grazes with waterproof plasters before entering water;
- Shower as soon as possible if you have been in potentially infected water

Weil's Disease can be serious. If someone becomes ill after an activity in water, they should seek medical advice urgently. You should therefore ensure that participants and their parents are aware of the possibility of Weil's Disease, even though it is rare.

For more information about Weil's Disease, including its symptoms, see www.nhs.uk/conditions/leptospirosis

Page 4 of 7

Specific Types of Visit, Activity and Hazard folder

Tides and Currents

If you are going near the sea or an estuary, check the time of high tide, and how high it will reach. Consider whether you could be cut-off or submerged by a sudden wave or quick rise in the tide level. The tide may advance more quickly than your group can retreat.

You should also find out whether there are any strong local currents. Rip currents are particularly dangerous and are a major cause of drowning.

You should ensure that everyone in the group is aware of any time constraints due to the tide, and any areas to avoid.

Quicksand

Quicksand, or 'sinking sand', occurs on beaches and estuaries throughout the UK. Certain weather conditions can increase the risk of quicksand, and pockets of quicksand can move and be in different positions with every successive tide.

Some indicators of quicksand are water bubbling up from below the surface and sand with a rippled appearance. However, it is not always obvious, and it might be underwater and so a hazard when paddling. You should therefore always be alert and supervise the group carefully.

HM Coastguard provides the following advice on what to do if you get into an area of quicksand:

- Stay calm;
- If you have a mobile phone, dial 999 and ask for the Coastguard;
- If you don't have access to a phone, try to attract the attention of passers-by, and get them to make the call;
- Make yourself as light as possible (for example, by taking your rucksack off) the lighter you make your body, the easier it will be to extract yourself;
- Spread your weight across a larger surface area to try to prevent any more sinking;
- Try to take a few steps backwards;
- Keep your arms up and out of the quicksand;
- Stop others from trying to help you, as they might get stuck too;
- Move slowly and deliberately.

Jellyfish and Other Sea Creatures

Stings from jellyfish or other creatures such as weever fish can be a hazard at the seashore. See OEAP National Guidance document <u>7e "Bites and Stings"</u>

The Surroundings

In addition to considering the risks posed by the water itself, you should consider whether there are any hazards nearby. For example:

- What is above you?
 - Could loose rocks fall, or be dislodged by a person or animal?
 - In some areas of the country, cliffs are inherently unstable and large rockfalls may occur without notice;

Page 5 of 7

- What is below you?
 - How close to the edge is it safe to go?
 - How will you ensure that everyone keeps away from the edge? Even small drops could be dangerous if a fall would be onto jagged rocks, into water, or into an inaccessible area;
- What is underfoot?
 - Could roots, uneven surfaces or slippery rocks, grass or mud result in a dangerous trip or slip?
- Is there livestock nearby, and could it enter your area?
- Are there any man-made hazards, such as derelict buildings, barbed wire, abandoned vehicles or dangerous litter?

Weather

Get a weather forecast before you go and understand how it might affect your location and planned activity. Heavy or persistent rainfall can alter situations enormously and rapidly – even when it is falling elsewhere. Riverbanks may become slippery, streams and rivers may rise quickly and flow faster, mudslides or landslides might occur. Wind will alter the sea state and may interact with tidal streams or estuary currents.

Conditions can also be affected by the weather in the days prior to the visit, including the weather in the surrounding upstream or uphill areas.

See OEAP National Guidance document 7 "Weather and Group Safety"

Preparation

For any visit or activity, you should be familiar with the nature of the group and the individual participants. When working at the water margins, it is particularly important to know whether you can trust individuals' behaviour, and it may be helpful to know their swimming ability and level of water confidence (these are not the same thing).

In damp cold weather, wearing suitable clothing with waterproof trousers and jacket will help to keep people warm and dry.

If you are planning to enter the water, bare feet might sometimes be appropriate, but usually some kind of footwear is necessary to protect the feet from cold water and from rocks, sharp edges etc. Wellingtons or other waterproof boots might be a good idea – however wellingtons can fill with water and make it difficult to reach safety.

You should also consider taking some spare clothing and towels with you. In sunny weather, sunscreen, hats and long sleeves may be needed.

You should consider toilet arrangements, and changing arrangements if necessary.

You should review your emergency plan and ensure that it takes account of the nature of the activity and its location. For example, you might need to ascertain what assistance is available if needed for rescuing someone from the water or evacuating them to a vehicle, whether mobile phones work at the site, where the

Page 6 of 7

Specific Types of Visit, Activity and Hazard folder

nearest vehicle access is, and where the nearest hospital is. See OEAP National Guidance document

4.1c "Emergencies and Critical Incidents – Guidance for Leaders"

Plan B

Plan B is an alternative – not an emergency procedure. Plan B should be prechecked and prepared in the same way as plan A. Plan B might consist of doing the same activity at a different location, or a different activity altogether. You should be prepared to move to Plan B before or even during the activity.

If you visit a place regularly you might be able to identify cut-off criteria. These are signs that circumstances have changed such that you need to move to Plan B. Examples might include the river or tide having risen above a certain point. However, remember that visiting one venue once a year for ten years is ten days' experience – not ten years'.

Your group may well be disappointed if they cannot complete the activity that was originally planned. A well-briefed group and a good Plan B can help to overcome this disappointment. If you move to Plan B, notify your establishment.

Leader Competence

It is important that there are enough competent leaders to provide effective supervision for the particular group, the planned activities and the environment you will be working in. You should ensure that leaders have the right skills, experience and attitudes to work in or near water.

See the following OEAP National Guidance documents 3.2d "Approval of Leaders" 4.3b "Ratios and Effective Supervision"

The Royal Life Saving Society (RLSS) National Water Safety Management Programme provides a flexible, modular framework of training for leaders of activities that take place in and around the water's edge. Details are available at: www.rlss.org.uk/professional-qualifications/nwsmp.

Group Management and Supervision

For general guidance, see OEAP National Guidance document <u>4.2a "Group Management and Supervision"</u>

When operating in or near water, direct supervision is usually necessary with most groups. You should assess the risks carefully if you are considering indirect or remote supervision.

Agree the safety rules and expectations before the visit and stick to them. If you decided on your pre-visit that it was unsafe to enter the water, then have confidence in your decision and do not be pressured into changing it.

Brief the group in a suitable place before the water is reached.

Page 7 of 7

Specific Types of Visit, Activity and Hazard folder

Review the situation - on arrival at your venue reconsider the key issues that were raised in your pre-visit. Has anything changed that means you should change to Plan B? During the visit be constantly alert to changes and be prepared to adapt plans or cut short the activity.

If you do enter the water, keeping the group on task will help to ensure safety, as incidents are more likely to occur during unstructured activity. Ensure that the group is aware that pushing or dragging others into water is unsafe and unacceptable.

Set physical boundaries beyond which the group should not venture. You might use fixed landscape features such as a wall, or place your own markers.

Having small groups, each with its own leader, is often better than one large group with several leaders. Ideally there will be enough leaders so that the overall leader does not have their own group. Group leaders should complete regular head counts and be aware of where everyone is at all times while in or near water.

If you are walking along a narrow track near water, such as a canal towpath, make sure that everyone present is aware of the dangers and how to respond. Leaders may consider placing themselves between the group and a potential hazard.

