

Coaching the Capsize and Immersion Drill in a single scull in a safe environment

During your Level 2 course you will be assessed on your ability to coach individuals on appropriate actions that they might take in the event of capsizing and immersion occurring. These notes provide an explanation to coaches of the rationale for performing a capsizing drill and a swimming test and guidelines on how to coach a capsizing drill session.



Why should participants carry out a capsizing and immersion drill?

Performing a capsizing and immersion drill in a safe environment, such as a swimming pool, is important so that participants know what to do should a capsizing occur outdoors, and they find themselves immersed in cold water.

One aim of practising the drill is to increase individuals' confidence in a controlled environment, and to educate them on what they should do, in the event of a capsizing. Coaching individuals to perform a capsizing drill and be immersed in water, also gives you as a coach, an indication of their competence and confidence in and under the water. Gaining confidence through practice in a safe environment can reduce any feelings of panic should a capsizing occur.

When coaching assess the likelihood of capsizing and immersion occurring and take action to manage the risk appropriately

To minimise the risk of capsizing and immersion occurring, you should take account of the level of experience of the participant(s) and the available boat types, whilst also considering the weather and water conditions, and the environment where you row.

Singles, pairs, and doubles may be more likely to capsize than larger boats such as fours and eights, in which a capsizing is more likely to occur at landing stages, when participants do not use the correct procedure for getting in and out of the boat, in the event of a collision, or when letting go of the oar or scull handle(s)! Tandem rigged fours (where the middle pair of rowers are rowing on the same side) are prone to rolling over when turning in poor conditions.

Plan what to do should a capsizing and immersion occur.

When coaching, plan for what you would do in different scenarios should a capsizing occur. Remember that the priority is to get the individuals out of the water as soon as possible. What control measures are in place to manage the risk of a capsizing/immersion occurring? Do individuals know what to do, to get out of the water as soon as possible? How easy would it be for individuals to reach the side and get out if swimming or paddling the boat to shore? Are there any locations where getting

out might be very difficult? You might limit the distance, or the area in which they row.

What control measures are in place to manage the risk if a capsize and immersion does occur? How will you assist in the rescue? If there is a coaching launch, is it on the water and ready to assist in the event of a rescue? How would you summon assistance? Are you carrying a throwline?



Take steps to reduce the consequences of a capsize should it occur.

e.g. by;

- Using a more stable boat.
- Ensuring that the crew wear buoyancy aids or lifejackets.
- Limiting the distance in the outing that participants move from the bank and from the safety of the boathouse.
- Checking that the buoyancy of the boat is adequate.

Self rescue is the last resort. Participants should only go out sculling where there are other individuals on the water or on the bank, who might be able to assist in a rescue. In conditions where the risks associated with a capsize would be increased, such as in cold weather, or poor conditions, the safest choice is not to go out on the water in the first place.

Always carry and use a throwline

Always carry a throwline when coaching, if you are on foot, cycling or in a launch, as this will assist you in rescuing an individual in the water. Throwbags can be obtained in various lengths but 15 to 25 metres is the usual choice depending on the location.

There is always the temptation for people to enter the water themselves to attempt a rescue and there have been many instances of rescuers successfully doing this without regard for their own life. There have also been many instances of rescuers entering the water and sadly becoming a second victim.

The advice is **DO NOT go into the water to attempt a rescue** – you may become a victim too!

Using a throw bag requires training and generally in a short time one can become very accurate and able to throw the line a good distance with little effort.

When aiming with your throwline, aim to throw the line so that it lands over the person in the water, this will make it easy for them to grab. Hitting the target directly can be difficult and you should practice using throwlines! The capsized drill session provides a good opportunity.

A throwline can be thrown directly to participants in narrow sheltered waters, but even where participants cannot be reached directly, a throwline will reduce the distance that individuals have to move with the boat before they can be towed in.



Coach individuals to stay with the boat!

One effect of cold water is to affect your muscles and your ability to swim; no matter how strong a swimmer you are “swim failure” can occur. Further detail on the risks of immersion in cold water, including swim failure is given in the pages on immersion and hypothermia. Coach the participants to **hold on to the boat at all times** after they have capsized so that they can **stay with the boat**.

Stay with the boat;

- **A capsized boat is more easily seen by those coming to help,**
- **A capsized boat provides you with a buoyant raft**
- **Staying with the boat allows you to pull your body out of the water to reduce rapid cooling.**
- **Staying with the boat allows you to re-enter the boat if you can manage**
- **In crew boats staying with the boat keeps the whole crew together enabling you to help each other**
- **Only leave your boat when you know you are safe or that staying with the boat will take you into greater danger or if the boat no longer remains an effective life raft.**



Stay with the boat

Righting and towing the boat

Where the wind and water temperature and conditions allow, and the boat capsizes close to the bank, then the boat can be turned over and towed. When the boat is the right way up, it can be towed with less resistance.

In combinations of cold water temperature and weather, high winds, fast stream or tide, or when there is a large distance from the bank, or the boat is too big and heavy, **towing may not be feasible**. In these circumstances, participants should remain with the boat and **get as much of their body out of the water as possible**, by lying across the hull or deck.

Lying on the upturned hull or deck

If immersed from a single scull, heat loss will be reduced if the participant can get as much of their body out of the water as possible by lying on the upturned hull of the boat, or across the deck.



How to paddle the boat whilst lying on top of the hull

Coach the participants to climb onto the hull using a combination of strong leg kick together with the arms pulling up on the deck or hull. Alternatively sliding up the hull from bow or stern can be achieved with less effort; holding on to a rigger and paddling with the other hand and using a leg kick

How to right the boat

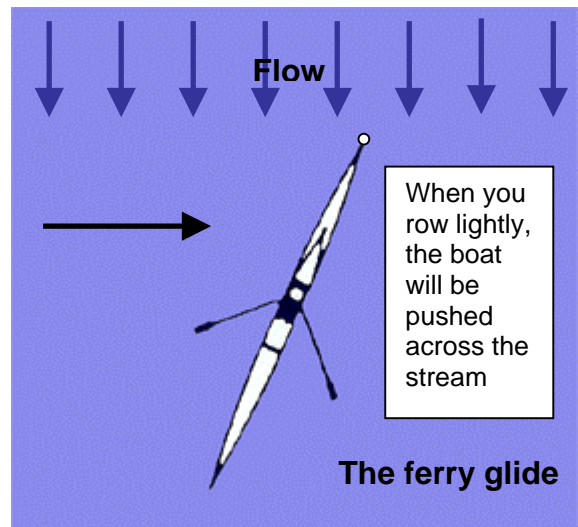
Where conditions are suitable to remain in the water and tow the boat, it can be easier to tow if the right way up. When coaching the capsize drill, coach the participants to arrange their oars loosely parallel to the hull and place a foot on the rigger and stand on the rigger to give leverage, while pulling on the saxboard. At the same time they should reach over the hull with their free hand to grip the far rigger and pull it up and over. They should take care to avoid the sculls or blades as the boat rights itself. As the boat turns the free hand should feel for the scull as it comes over.

How to tow the boat

Coach the participant to keep hold of the boat and to move towards one end. By using a lifesaving kick, they can keep their head clear of the water and be able to breathe whilst keeping a lookout to observe their direction of drift.

Coach participants to tow or paddle the boat into the stream or wind, whichever is the greater and to use the **ferry glide** to tow towards a suitable landing site. Explain that this may sometimes be the quickest method to get back to the side.

A ferry glide involves pointing the boat at about 30 degrees from the direction of the stream or wind, and rowing lightly so that the boat is pushed in a sideways direction. You can do this rowing on, with the bow pointed into the stream, or backing down when the stern is pointing into the stream. This can be a useful manoeuvre when backing onto a stakeboat.



Landing

When landing the boat participants should be coached to ascertain their speed of drift and be aware of possible underwater obstructions and dangers; e.g. tree roots, scaffold poles, glass etc.

When at the side they should test for the bottom with their feet, and to be aware of difficulties with soft mud etc.

Once on a firm base they should walk out to waist depth before attempting to do anything with the boat.

If the participant has been immersed for a long time they shouldn't stand up too quickly but keep their body as horizontal as possible to prevent surges in blood pressure.

Once in a safe situation the participant(s) should attempt to empty the boat by half turning and carefully lifting the boat higher as the water flows out. If practical it is easier if to remove the oars before lifting and stow them safely. Don't let go of the boat or it may drift out of your grasp.

Getting back into the boat

It is a good idea to practice trying to re-enter a single scull in the safe environment where you practice your capsize drill. You need to practice, as getting back into the boat can be tricky and can require a lot of energy. The ability to get back into a boat in deep water can be critical to the safety of individual scullers in cold water, but remember that what might be achievable in a safe environment may be more difficult when a capsize occurs for real.

When attempting to re-enter the boat in deep water, participants will have to be aware of the speed of drift and other hazards.

When practicing in a safe environment, due care needs to be taken, as saxboards tend to be fragile and riggers very hard.

Getting back into the boat from deep water

Imagine that you have capsized, and have righted the boat. You are in the water on the strokeside.

To re-enter the boat from deep water,

1. Lock the two handles together in the forward position with your right hand,
2. Keep your hand locking the handles together.
3. Put your left hand on the deck at the front of the cockpit.
4. Kick your legs hard to lift yourself up out of the water,

5. Push down with your left hand, as if you were getting out of a swimming pool at the side.
6. Turn towards the stern and quickly sit on the deck/slides with your feet in the water. You should be facing out of the boat.
7. You can then swing your feet into the boat and then find the seat to sit on

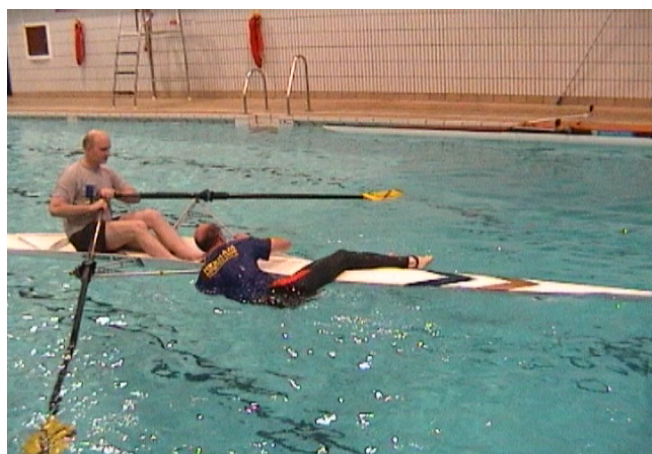
and to do this within 60 seconds is a requirement in the World Class Start Programme

Getting back into the boat from shallow water

Re-entering the boat from shallow water; where you can stand up, is easier than in deep water.

Using the “Buddy” system of rescue

One option to rescue an individual in the water using a single scull is to get them to support themselves on the stern deck. In cold water conditions reducing the amount of time in the water reduces the dangerous effects of cold on the body. The individual can be supported out of the water, and you may be still able to scull the boat to safety.



The boat is a 75 kg Janousek single scull. The sculler weighs 80 kgs and the victim 80 kgs

The boat is held steady with the blades in the safe position whilst the victim mounts the stern. The riggers are sufficiently out of the water to enable the sculler to propel the boat to safety.



Using the same boat and sculler, but with a 100 kg + victim being transported; again with sufficient rigger clearance to allow steady progress.



Coaching the capsize and immersion drill

The purpose of the capsize and immersion drill is to develop individuals' confidence in knowing what they might do if a capsize occurs. Having practised in a safe environment, they will be better prepared and more confident, and will panic less if immersion occurs in cold water, in an outdoor environment. This can help them to take the most appropriate action. As a coach, you should conduct a thorough risk assessment of the environment that you are coaching in, and before every outing you should update this assessment of risk according to any changes, e.g. changes in the water and weather conditions, and manage the risk appropriately.

Planning a session

It is important to carry out a check of the boat to be used in a capsize drill, as you would normally with any boat before going on the water. In particular; are the heel restraints adjusted correctly on the shoes, and are the buoyancy compartments sealed? To remind yourself of checks that should be carried out on any boat before an outing, refer to the **Water Safety Code**. Pay particular attention to thoroughly cleaning the boat, including bleach in the washing solution if it is being used in a swimming pool

Check the heel restraints

When coaching the capsize drill, you should emphasise to participants the importance of checking that their heel restraints are correctly adjusted. Participants should easily fall out of a capsizing boat without having to intervene to free themselves. **The heel restraints should be separate and tight enough and short enough to ensure that each heel does not rise above the lowest fixed point of the shoe.** Your heels would normally rise no more than 40mm. The shorter the heel restraint, the easier it is to get your feet out.

Resources

To carry out a capsize drill coaching session you will need;

1. **Access to a pool** deep and large enough (e.g. 6ft deep, 20ft wide, 40ft long) to allow the drill to take place. The pool must be clear of other swimmers, lane ropes etc. (Check that the access to the pool allows you to get a boat through the doors)
2. A clean and safety checked **single scull(s)** (1 X) and set of sculls.
3. A selection of different **lifejackets, buoyancy aids** and **throwlines**.
4. **Assistants** to help hold the ends of the scull and control its position in the water.

The swim test

The swim test is designed to check that individuals are competent swimmers and are confident both in and under the water. A poor swimming ability and a lack of confidence in water, will dramatically increase the risk presented by a capsize and immersion in water. However, it should be stressed that the ability of even very able swimmers to swim is drastically reduced in cold water and that **staying with the boat** is essential.

What is the required minimum swimming ability?

All rowing participants should be able to swim **at least 50m** in light clothing at least half of which should be carried out on the back using a breaststroke kick, also known as a life saving or frog leg kick. Clubs may wish to extend this depending on their local situation and hazards. **Participants should be able to demonstrate that they are also competent underwater, in treading water, and in swimming on their front and back.** If a participant for physical or other reasons cannot meet the requirements of the test, then they must wear an approved buoyancy aid or lifejacket when in a boat.

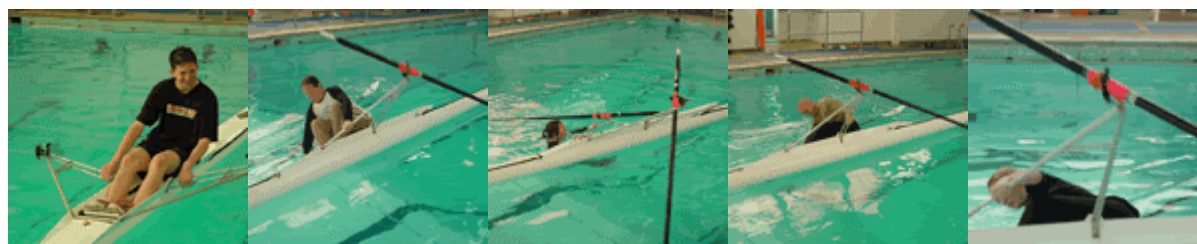
Why *check* swimming ability?

As a coach you will not know the exact swimming ability of the participants, unless you check it. Participants may present swimming and life saving badges or certificates, but it is in everyone's interest to observe their swimming ability. In the case of juniors you should not rely on the signatures of a parent or guardian as proof of swimming ability. After the test it is important to log the results of the swim test and the capsized drill as this is vital information for all coaches when making risk assessments.

When outlining the session to participants, make sure that you indicate the different depths of the swimming pool clearly and point out any important safety information on the procedures with regard to diving in etc.

Start the swimming test at the shallow end, so that participants can lower themselves gently into the pool.

The breast stroke kick on the back will be needed in the event of a capsized boat to tow the boat using the hull as buoyancy. The use of a float can be beneficial for practicing breaststroke kick on the back.



Coaching the Capsize and immersion drill (Practical)

The aim is to replicate a worst-case scenario - upside down, still attached to an overturned boat but under safe, controllable, repeatable conditions. To remind you of the steps involved there is a **guide to coaching the capsized drill** in pictures.



1. Practicing capsizing the boat

The first step is to educate individuals in what it feels like if a boat capsizes and they go under the water. Check that they can perform the drill with confidence, and offer them a few opportunities to practice.

Hold the poolside rigger and gently ease the participant away from the side of the pool. You can use assistants to hold the ends of the boat. Keeping hold of the rigger allows you a high level of control, good eye contact and reassures the less confident that they can be pulled back to the side easily. Ask which way the participant wishes to capsize (left or right) and gently raise or lowers the rigger accordingly.

Remind them to be careful that they do not bang their head on the riggers when surfacing.

Check that they are happy and confident and ready to proceed before the capsize!

When capsizing with the sculls in

Coach the participant to slide the seat to be in line with the riggers and push one scull forward. This ensures the spoon is close to the boat and does not hit the bottom of the pool. The participant then holds the rigger mainstay with the free hand, pushes the other scull forward and takes hold of the rigger mainstay.

Breaking the drill down into stages

You can coach the drill in three or four stages to allow participants to successively increase their confidence. You should coach each participant to progress at a rate that they are comfortable with, to help build their confidence. Here are some suggested stages that the drill can be broken down into.

Stage 1: No Sculls, feet out of the shoes or clogs.	You as the coach, or an assistant holds the rigger from a position on the side of the pool. The participant gets in and brings the seat level with the rigger. The participant must then hold the rigger mainstays to hold themselves in and to turn over completely with the boat.
Stage 2: No Sculls, feet in the shoes or clogs.	Follow the same procedure as in stage 1, but this time encourage the participant to perform the drill with their feet in the shoes or clogs. This reinforces the previous capsize and adds one level of difficulty. This is an excellent opportunity to teach how loosely laces and velcro straps should be adjusted.
Stage 3: Sculls in swivels, feet out	Once in the boat, the participants should be taught the safe position which will allow the boat to be pushed to the middle of the pool under control. Capsizing with the sculls in the swivels should be done at the deep end to avoid the sculls getting caught on the bottom of the pool.
Stage 4: Sculls in swivels, feet in shoes or clogs	Coach the participant to capsize the boat with the sculls in the swivels and their feet in the shoes or clogs.



The participants should easily fall out of the boat when capsizing or when capsized.

One way to test an individual's confidence underwater is to get them to demonstrate that they can hold themselves in the boat and tap on the bottom of the upturned hull three times before surfacing. **You would of course not bother to do this in practice if a real capsizes occurs**, it is just to show that they can remain calm underwater. As participants should fall out easily from the boat, this may sometimes be difficult!

2. Practising what to do once immersed in the water.

In a session, you should encourage participants to practice at least some of the following;

1. Righting the boat and towing the boat in the water
2. Pulling the body out of the water onto the *upturned hull* and paddling the boat
3. Pulling the body out of the water onto the *deck of a righted boat* and paddling.
4. Getting back into the boat from deep water
5. Performing the "Buddy" rescue