HRSA Monthly Report

November 2019

Stephen Worley
Incident Reports in November

Indoor Rower collapses

An 18 year old male collapsed after exercising on an indoor rowing machine at a university indoor athletic centre, lost his pulse and stopped breathing. CPR was started and an ambulance was called. The man regained a pulse following a shock from an Automatic External Defibrillator (AED). This treatment was provided by a coach and the centre staff. He was taken to hospital by Air Ambulance.

He was treated in hospital and three weeks later he was fitted with an implantable cardioverter-defibrillator (ICD) and discharged from hospital the following day. It was later confirmed that he does not have a family history of cardiac issues.

The advice for people who are taking exercise is:

- If you do not feel well then do not exercise.
- If something is making you feel unwell then stop doing it.
- If you have any concerns about the effect that exercise may have on your health then seek advice from your doctor and follow the advice given.

The advice for people who are in a position to assist someone who has collapsed is:

- Recognise the signs and symptoms.
- Check for danger.
- Call for help (including dial 999).
- Know when to start CPR and how to do it.
- Know where your nearest AED is and send someone to get it.
- Know how to use an AED (switch it on and listen for the instructions).

The best way to learn CPR is in a face-to-face course where performing chest compressions can be experienced and your technique corrected on a mannequin. If this is not available, or as a refresher, then try the Resuscitation Council UK free, internet based, interactive, video training pack called Lifesaver (see https://lifesaver.org.uk/).

Rower feels ill when rowing

During a full race pace piece, the stroke man signalled to stop. He was doubled over and said that he had a problem with his heart. There was an event in progress so the crew took the boat to the event ambulance. The casualty’s heart rate was fast and wasn't coming down and he was taken to hospital where medication was administered to control and reduce the heart rate to normal. The man is now not training and awaiting an appointment with the Cardiologist.

This incident was well managed. The rower recognised that he had a problem and stopped rowing. Others recognised his illness and provided appropriate support by taking him directly to the nearest medical care. There is more information on what to do if someone collapses in the Safety Alert, here.

This report is a safety guidance document. Please read our safety message and disclaimer in RowSafe.
Lessons learned from a head injury
A rower was accidentally hit on the head by a blade as they were being picked up to be put into the boats. She felt well enough to carry on with the outing.

A little while later she told the cox that she was beginning to lose her vision. The boat returned to the boathouse, her vision returned and she felt better. She went into the changing rooms where she vomited. She was still lucid and not drowsy or confused.

She took a taxi to hospital with friends. Her CT scan was normal and she was discharged the same evening.

The correct action would have been to:
- call an ambulance
- take her by ambulance to the nearest appropriate hospital
- ensure that she was accompanied by a responsible person

As a result the club has decided to
- develop a formal Emergency Action Plan, this was also identified as "to address" in the recent safety audit
- include taking care with blades in the Emergency Action Plan
- include the Emergency Action Plan in the standard induction to the club

There is further information on Head Injuries in the Safety Alert here.

The following simple incidents caused disproportionately serious harm.

Slipped on mud
Two rowers were carrying a 2x when one slipped on mud. His arm took his body weight and the weight of the boat; this fractured the head of his humerus. He had X-rays and was admitted to hospital for emergency surgery. The medical treatment included reconstructive surgery, and a programme of physiotherapy to restore movement in the shoulder joint. A four to six month lay-off from rowing is envisaged.

Wash from a launch
It was reported that a launch regularly passes a moored narrow boat on a canal without slowing down. On one occasion children were scalded by water splashing out of a pan on the stove allegedly caused by the movement of the narrow boat resulting from the wash from the launch.

“Minor DIY Amputation”
When using the heavy metal fire escape door to exit the club, a member accidentally caught his right index finger in the door as it slammed shut. This resulted in the loss of a corner of the finger.

This report is a safety guidance document. Please read our safety message and disclaimer in RowSafe.
2- snapped in car park

A boat trailer was being towed out of a tight parking spot. One boat was seen to touch the towing vehicle so the ties were undone and the boat slid away from the vehicle. When the trailer was moved, one of the ties was caught under a wheel, tightened against the boat and snapped it.

We need to take care whatever we are doing.

Fast flowing water

This is a reminder to those clubs that row on the Thames, it was first issued by the Thames RRC Regional Rowing Safety Adviser, Tony Reynolds.

The PLA display flags and the Environment Agency display boards to warn of strong streams.

A Red Board means: Caution strong stream. We advise users of all boats not to navigate because the strong flows make it difficult and dangerous.

A Yellow Board means: We advise users of all unpowered boats not to navigate. There is more information here.

The PLA has established a warning system to indicate potential fast ebb tide flows created by land water from the non-tidal Thames (fluvial flow). There are three main levels of advice, which are:

- RED FLAG – Extreme Caution – EBB TIDE Very Strong Fluvial Flows. All man-powered vessels are advised not to go afloat on the Ebb Tide.
- YELLOW FLAG – Caution – EBB TIDE Strong Fluvial Flows. All users of man-powered vessels should navigate with extreme caution and consider whether it is safe for them to go afloat on the Ebb Tide.
- GREEN FLAG – Average Fluvial Flow Conditions

In strong flows, the Port of London Authority advises man-powered vessels, in particular; Beginners, Novices, Younger Junior (J15’s and younger), or any weaker crews, and those that do not usually navigate on the tidal section of the river Thames not to go afloat on the Ebb Tide. There is more information here.

These warnings are provided to keep people safe, they should be respected.
Incidents involving fast flowing water

In one incident, an apparently competent 4x was swept by the stream into the side of a moored barge. The 4x was towed off the barge and then capsized and the crew climbed on top of the boat. There were two launches in the vicinity and two scullers from the 4x climbed from the water into each launch.

During the rescue, both launch drivers stopped their engines to protect the people in the water. One of the launches was then swept sideways by the stream into a tree. The top of the launch was held by the tree and the hull was swept downstream by the flow. This caused the launch to capsize.

The launches are of the catamaran type, as illustrated here. These make excellent coaching and umpiring launches because they have a high platform with an unobstructed view in all directions and they produce very little wash. However their high centre of gravity can cause them to become unstable in some conditions.

These boats are far from ideal when used as safety boats in fast flowing water because of their high centre of gravity and low lateral stability. As the boat heels then the downside sponson becomes lower in the water and the righting moment increases (as it should). However, once this sponson is immersed, then the righting moment no longer increases but decreases as the angle of heel continues to increase.

There may also be an issue with their use in rescues partly because they do not provide a very stable platform when the person being rescued is assisted from the water into the launch onto the boat from the side. They also have limited safe passenger capacity so cannot safely rescue many people at a time.

During this incident, a launch driver was in the water but his lifejacket failed to inflate. Another one failed when tested the next day.

In another incident at a different club the strength of the stream coming off the edge of moored barges prevented a 4- from being able to adhere to the left of the channel, and they were carried into the path of a 2x. The boats collided, nobody was injured but there was some boat damage.

The lessons to be learned from this incident are clear. Please consider how this information can be used in your club.
Rowing in Cold Weather
A newly appointed CRSA has been asked to produce some guidance regarding rowing in cold conditions, and asked for advice. The following advice was provided.

If you look in RowSafe (here) then you will find advice on rowing in cold weather. This is covered in some detail in Sections 8.1 and 9.1. There is also a Safety Alert entitled Cold Water Kills, this can be found in the archive of Safety Alerts here.

Any specific rules that your club decides to adopt should be based on this advice and on the conditions in the place where you row. In other words it should be based on your own risk assessment.

Adults are not the same as juniors in that adults tend to be bigger and heavier. Their body core does not chill so rapidly in cold weather. You will need to be more careful with juniors and masters.

The simple advice for everyone in cold weather is to:-

• use more stable boats that are less likely to capsize
• stay together in groups and be ready to perform buddy rescue
• plan how you would help someone who has capsized to rewarm
• keep outings short and fairly intense, do not spend too much time stationary on the water
• ensure that everyone is adequately dressed and
• take extra care of coxes and coaches, they are not working hard to keep warm

During a rescue, never enter the water – you will cool rapidly and become disorientated no matter how good a swimmer you are.

Hi Vis Kit

There has been protracted discussion in one club about the need for hi-vis kit. The junior section has been problematic; their view is junior crews were highly supervised and the risks reduced accordingly. It was explained that supervision does not always prevent collisions. There was an example of this in last month’s report.

The club colours are dark and many juniors have just bought club kit. I explained that I wear a bright yellow long sleeved running shirt under my dark red club kit. This works perfectly well and provides protection from the cold when needed.

This report is a safety guidance document. Please read our safety message and disclaimer in RowSafe.
It had also been suggested that lights were an alternative to hi-vis kit; this is not the case. Lights work well in the dark and reduced visibility but not in daylight. Hi-vis is intended for daylight and dusk. Use lights and wear white above the waist if it is dark.
Pontoons and landing stages

There have recently been incidents involving rowing pontoons. There were two in November; in one the fendering fell off because the underlying wood was rotten. In another a rower slipped into the water between the pontoon and the bank because the downstream end had floated away. Recently protruding screws damaged a boat.

Many different types of pontoon are used in rowing. I would like to focus on the simple, light pontoons and landing stages that are used by rowers, normally so that they can put the boat into the water without having to step into the shallow water at the edge of the waterway or reach down from a high bank.

It is important, from time to time, to check that the floating pontoons or fixed landing stages are clean and in good condition. This can start with a quick check at the start of each outing, this could consist of making sure that the surface is:-

- clean with no muddy or slippery patches
- free of tripping hazards (equipment, ropes, etc.)
- check that there are no gaps between the bank and the structure
- check that there are no gaps between adjacent parts of the structure

More detailed checks should be made every month, these could include.

- check that the wooden parts are in good condition and free from rot, throughout
- check the fendering is firmly fixed, particularly at the corners
- check that there are no protruding screws, etc.
- check that pontoons have the correct buoyancy (floating level at the right height)
- check that the structure is securely anchored to the bank and the river bed (as appropriate)

Rowing in Floods

The Rowing in Floods Safety Alert was issued this month, it is available [here](#) and a copy is included with this report. It may help to read this alongside the Red Flag (or Board) Safety Alert, available [here](#), as this stresses the importance of knowing whether the flag imposes a restriction or provides advice.

The Rowing in Floods Safety Alert was based on more detailed information written in preparation for an article in Rowing and Regatta, the article is available [here](#) and the more detailed information can be found in Appendix 1. This contains specimen Risk Management Plans and may be incorporated into RowSafe at its next update.
Keep the boathouse tidy

In last month’s report, there was a suggestion that it is important to keep the boathouse tidy in order to reduce risks to rowers who cannot see. Blind people are very careful to remember where things are and rely on those things always being in the correct place. Tidiness is also important for rowers who use a wheelchair. These photos were in an incident report.

(These photos are reproduced in monochrome in order to protect the identity of the club.)

Two of these photos show a disabled access ramp. Many injuries are caused by slips, trips and falls. Keeping the equipment tidy will help to prevent these too.

The need for Prop guards on launches

There was a request for information on Prop guards on launches. The following information was provided.

Advice on this matter was included in the December 2017 monthly report, (this was attached and is available on request). The RYA guidance is available here.

Some time ago I discussed this with the RNLI. In general, they do not fit prop guards to Lifeboats. They are not fitted to D Class Inshore Lifeboats but they are fitted to Inshore rescue boats (IRBs). These are primarily used by RNLI lifeguards so that they can reach casualties in the surf, fast.

My personal view is similar to that of the RYA and that they should not be used because of the way they limit the speed and acceleration of the rescue craft. If the launch is operated correctly then they should not be needed but there may be some special circumstance where their use is appropriate.

This report is a safety guidance document. Please read our safety message and disclaimer in RowSafe.
Work with British Canoeing

In last month’s report I wrote that some paddlers had assisted four young rowers, and that this information was provided to colleagues at British Canoeing. These colleagues have written to the Canoe Clubs “to pass on a heartfelt well done to all paddlers that took part in the rescue you from the team here at British Canoeing.”

Information was provided on another incident involving a group of rowers and a group of junior canoeists. There was a collision and the coach of the junior canoeists is alleged to have used bad language towards the rowers. It is understood that this incident has been referred to the British Canoeing Lead Safeguarding Officer.

what3words

The what3words Safety Alert was issued this month, it is available here and a copy is included with this report. The next day, an email containing the following information was received.

I’ve had the what3words app on my phone for a while, and in the wake of the latest safety alert, found myself using it just last Saturday! I was returning from coaching a session when I came across a young woman who had suffered an epileptic fit on the towpath. Her support worker was with her, and was on the line to the emergency services when I was passing, but she wasn’t able to describe their precise location. Three words later, and the dispatch operator was able to confirm our location and the paramedics came straight to us.

IPV Code

There was a request for information on the Intended Pleasure Vessel Code from a coastal rowing club. The following advice was provided.

The is available here. It is in two parts:-

• Part 1 deals with the use of a pleasure vessel for business purposes
• Part 2 deals with race support boats. This is the part I will focus on.

It helps to understand the definitions as the application of these regulations all depends on the use that the vessel is being put to at the time.

Intended Pleasure Vessel (IPV) for Part 2 of the Code , means any vessel intended to be used, or normally in use as, a Pleasure Vessel but which is used at sea as a Race Support Boat.
The definition of Pleasure vessel is long and complicated (it is in 2.24 of the code) simply put it is:

Any vessel which at the time it is being used is used only for the sport or pleasure of the owner or the immediate family or friends of the owner. If owned by a club then persons on board are employees or officers of the club, or their immediate family or friends; and

on a voyage or excursion for which the owner does not receive money other than as a contribution to the direct expenses for the voyage or

any vessel owned by a sports club the purpose of sport or pleasure which, at the time it is being used, is used only for the sport or pleasure of members of that club or their immediate family, and for the use of which any charges levied are paid into club funds and applied for the general use of the club;

Other boats, such as commercial fishing vessels or registered passenger vessels are known as "coded" vessels and none of this applies.

Part 2 of the code only applies when race support boats are being operated within 3 miles of the shore. If it is beyond that then the IPV code does not apply and the normal commercial shipping rules do apply.

Very simply, if you use a boat for the sport or pleasure of the owner or his family (even if that owner is the club) and it is used temporarily as a race support boat then it remains a Pleasure Vessel and does not become an IPV and no rules apply. (see para 2.1 of the attachment of the code.)

If the Rowing Club borrows a sailing club boat and uses it as a race support vessel and pays the sailing club a fee that is greater than the normal expenses for that journey then it may be an IPV.

If you think that the IPV Code does apply then the operator of the vessel should complete the form at the end of the attached document.

If you look at the form at the end of the IPV code then you will probably not need to worry about the DSM certificate. This is the Domestic Safety Management certificate issued by the Maritime and Coastguard Agency. It is only required if the Operator makes more than 100 IPV Code movements across the Operator’s fleet per year beyond a seaward box of 6 x 1 miles; and by any Operator carrying more than 3 passengers or more than 10 persons in any location at sea; and any Operator on any single voyage of more than 150 miles at sea. I doubt that a DCM will be needed by any rowing race support boat. The 6 x 1 mile box extends 1 mile from the coast and three miles along the coast in both directions from the point of departure.

The SMS is the Safety Management System provided by the operator. The size, detail and complexity of the SMS should be commensurate with the level of risk presented by the type and frequency of IPV voyages completed by the Operator. There is further guidance in the Code.
Appendix 1 - Rowing in floods

There are five different issues with floods. They are:-

1. The water in flooded rivers tends to move quickly
2. The water in flooded rivers tends to be turbulent,
3. Stationary objects, such as buoys, in fast moving water are hazardous
4. The water over flooded land may hide solid objects (e.g. fence posts) slightly below the surface
5. Flood water is often contaminated with sewage, farm animal waste and other materials, and may contain other debris

1. The water in flooded rivers tends to move quickly

<table>
<thead>
<tr>
<th>Hazards</th>
<th>Barriers</th>
<th>Hazardous Event</th>
<th>Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>the speed of</td>
<td>Finding a land based alternative activity</td>
<td>inability of rowers to make</td>
<td>Using a launch to rescue the crew and then</td>
</tr>
<tr>
<td>the water</td>
<td>Finding an alternative stretch of water (e.g. a canal)</td>
<td>headway against the flow</td>
<td>returning for the boat</td>
</tr>
<tr>
<td>flow</td>
<td>where the water is moving less quickly</td>
<td></td>
<td>Landing the boat and carrying it back to the</td>
</tr>
<tr>
<td></td>
<td>Starting the outing by rowing upstream so that it is</td>
<td></td>
<td>boathouse</td>
</tr>
<tr>
<td></td>
<td>downstream back to the boathouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Using bigger, faster boats (e.g. eights rather than</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>singles)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mixing crews so that Juniors row in boats with stronger,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>more experienced rowers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Staying close to the bank and the inside of bends where</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>the water speed is likely to be a little less</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This report is a safety guidance document. Please read our safety message and disclaimer in RowSafe.
2. The water in flooded rivers tends to be turbulent,

<table>
<thead>
<tr>
<th>Hazards</th>
<th>Barriers</th>
<th>Hazardous Event</th>
<th>Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbulence in fast moving water particularly problem downstream of obstructions (e.g. bridges).</td>
<td>Finding a land based alternative activity</td>
<td>Steering and retaining control of boats becomes difficult as turbulence can cause a boat to veer off course surprisingly quickly.</td>
<td>Using a launch to rescue the crew and then returning for the boat</td>
</tr>
<tr>
<td>Turbulence is often just below the surface and invisible from the bank or boat.</td>
<td>Finding an alternative stretch of water (e.g. a canal) where the water is less turbulent</td>
<td>boats can be swept into a stationary object and perhaps pinned against it or pulled under it</td>
<td>Provision of helpers with throw lines on the bank</td>
</tr>
<tr>
<td>Swimming can be very difficult or impossible due to undertows.</td>
<td>Avoid areas that can be expected to be turbulent</td>
<td></td>
<td>Provision of support by a properly trained and equipped First Aider</td>
</tr>
<tr>
<td></td>
<td>Using coxed rather than coxless boats</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use larger boats.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Stationary objects, such as buoys, in fast moving water are hazardous

<table>
<thead>
<tr>
<th>Hazards</th>
<th>Barriers</th>
<th>Hazardous Event</th>
<th>Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>The flow of water past anchored stationary objects such as:</td>
<td>Finding a land based alternative activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moored boats</td>
<td>Finding an alternative stretch of water (e.g. a canal) where the water is less turbulent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buoys (both for navigation and mooring)</td>
<td>Revision of the circulation plan to take the obstructions into account</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridges</td>
<td>Taking care to avoid the obstructions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pontoonos</td>
<td>Not stopping upstream of an obstruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weirs</td>
<td>Using coxed rather than coxless boats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floating docks or</td>
<td>Having a coach in a launch supervise the outing and provide an extra lookout</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any other obstruction that the water flows past quickly.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. **The water over flooded land may hide solid objects (e.g. fence posts) slightly below the surface**

<table>
<thead>
<tr>
<th>Hazards</th>
<th>Barriers</th>
<th>Hazardous Event</th>
<th>Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>fixed obstructions just below the water in flooded areas</td>
<td>Finding a land alternative activity&lt;br&gt;careful navigation and local knowledge to avoid obstructions&lt;br&gt;keeping a good look-out for indicators of obstructions&lt;br&gt;operating a buddy system</td>
<td>Collision with a fixed obstruction just below the water in a flooded area</td>
<td>Check the depth and, if appropriate, carry the boat back to the boathouse&lt;br&gt;Provision of support by a properly trained and equipped First Aider&lt;br&gt;Buddy Rescue</td>
</tr>
</tbody>
</table>

5. **Flood water is often contaminated with sewage, farm animal waste and other materials, and may contain other debris**

<table>
<thead>
<tr>
<th>Hazards</th>
<th>Barriers</th>
<th>Hazardous Event</th>
<th>Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood water contaminated with untreated sewage or with animal urine and faeces.</td>
<td>Finding a land based alternative activity&lt;br&gt;Avoiding or minimising exposure to the water&lt;br&gt;Keeping all cuts and grazes covered with a water-proof dressing&lt;br&gt;Avoid eating when afloat and maintain good hand hygiene</td>
<td>serious illness (e.g. Weill’s disease) if the water is ingested or enters the body through uncovered cuts or grazes</td>
<td>Washing or showering after the outing&lt;br&gt;Seeking medical treatment as soon as any symptoms are noticed</td>
</tr>
<tr>
<td>Debris in the water</td>
<td>Finding a land based alternative activity&lt;br&gt;Keeping a good lookout and taking care to avoid the debris&lt;br&gt;Using coxed rather than coxless boats&lt;br&gt;Having a coach in a launch supervise the outing and provide an extra lookout</td>
<td>Collision with debris</td>
<td>Using a launch to rescue the crew and then returning for the boat&lt;br&gt;Provision of support by a properly trained and equipped First Aider</td>
</tr>
</tbody>
</table>