

## 12 Event Risk Assessment

### 12.1 Risk matrix and risk levels

We have assessed activities at Runcorn Rowing Club Head races using the following matrix and risk levels.

		Severity of Outcome		
		Slightly harmful 1	Harmful 2	Extremely harmful 3
Probability of accident	Highly unlikely 1	Trivial risk 1	Tolerable risk 2	Moderate risk 3
	Unlikely 2	Tolerable risk 2	Moderate risk 4	Substantial risk 6
	Likely 3	Moderate risk 3	Substantial risk 6	Intolerable risk 9

### Risk Levels

Risk Level	Definition
<b>Trivial, 1</b>	No action is required.
<b>Tolerable, 2</b>	No additional controls are required. Consideration may be given to a more effective solution or improvement.
<b>Moderate, 3 or 4</b>	Efforts should be made to reduce the risk. Risk reduction measures should be implemented within a defined time period. Where the moderate risk is associated with harmful / serious consequences further assessment may be necessary to establish more precisely the likelihood of harm as a basis for determining the need for improved control measures.
<b>Substantial, 6</b>	The activity should not be started until the risk has been reduced. Considerable resources may have to be allocated to reduce the risk. Where the risk involves activity already in progress, urgent action should be taken.
<b>Intolerable, 9</b>	Activity should not be started or continued until the risk has been reduced. If it is not possible to reduce risk even with unlimited resources, activity has to remain prohibited.

## 12.2 On land prior to the race

Ref.	Situation Hazard	Control Measures	Risk	Effectiveness Record	Conclusions
01.1	Traffic on the site & parking areas	Areas marshalled by members of RRC.	3	No reported incidents.	Hazard adequately controlled.
01.2	Injury while assembling boats	Competitors are generally experienced members of rowing clubs. Qualified first-aiders provide 1st Aid.	2	Only minor incidents recorded.	Hazard adequately controlled.
01.3	Chemical incident at Mexichem Chlor	Mexichem Chlor (formerly Ineos Chlor) is informed when races are scheduled, and we become part of their Off-Site Emergency Plan. Marshals are present to control competitors. Details of response are provided in the Event Safety Plan.	3	No recorded incidents.	Hazard adequately controlled.
01.4	Traffic incident on M56 motorway.	Marshals present to control competitors.	3	No recorded incidents.	Hazard adequately controlled.
01.5	Fire.	Marshals present to control competitors. Details of response are provided in the Event Safety Plan sent to all Clubs and Umpires attending.	3	No recorded incidents.	Hazard adequately controlled.
01.6	Inclement weather, or dangerous conditions on the course.	The course is inspected before the event starts and weather forecasts / radar maps are consulted in order to assess conditions. The Race Committee in consultation with the Safety Advisor may choose to curtail, alter or suspend the race.	4	No occurrences of cancellation in the last 5 years.	Hazard adequately controlled.
01.7	Interaction e.g. collision between competitors and spectators.	<ul style="list-style-type: none"> <li>• One of the prime duties of the Crew Call team, Control Commission (boat safety inspections) and the landing stage marshals is to warn spectators of the activities of crews.</li> <li>• As much as possible, spectators are segregated in the boating area.</li> <li>• Because of the nature of time-trial racing, there are relatively few spectators at this type of event.</li> </ul>	2	No recorded incidents.	Hazard adequately controlled.

### 12.3 Going up to the start

Ref.	Situation Hazard	Control Measures	Risk	Effectiveness Record	Conclusions
02.1	Capsize	<ul style="list-style-type: none"> <li>- All competitors are members of Rowing Clubs affiliated to British Rowing and will have been taught procedures to deal with capsize. Qualified umpires and Safety Launches marshal competitors up to the start.</li> <li>- All launch drivers will have a RYA National Powerboat Level 2 Certificate and are in radio contact with Race Control, who can summon 1<sup>st</sup> aid if required.</li> <li>- See also Appendix 12 of the Event Safety Plan (Weill's Disease or leptospirosis).</li> </ul>	4	No reported incidents.	Hazard adequately controlled.
02.2	Collision	<ul style="list-style-type: none"> <li>- All competitors are members of Rowing Clubs affiliated to British Rowing and will have been taught procedures to deal with capsize.</li> <li>- Qualified umpires, marshals and Safety Launches marshal competitors up to the Start.</li> <li>- Experienced Marshals supervise the start marshalling areas above the Start.</li> <li>- All launch drivers will have a RYA National Powerboat Level 2 Certificate and are in radio contact with Race Control, who can summon 1<sup>st</sup> aid if required.</li> </ul>	3	No reported incidents.	Hazard adequately controlled.

Ref.	Situation Hazard	Control Measures	Risk	Effectiveness Record	Conclusions
02.31	Cold and exposure	<ul style="list-style-type: none"> <li>- Juniors below 15 years on 1 September 2015 are not allowed to enter the race.</li> <li>- The event will be modified, delayed or cancelled if current conditions or the forecast for the event are considered to cause an undue risk of cold or exposure.</li> <li>- Competitors' boats and equipment are checked prior to embarkation to ensure their fitness to race. This includes clothing appropriate to the weather conditions.</li> <li>- Safety boats, and Marshals at the start, carry exposure blankets to use in an emergency.</li> <li>- Measures have been adopted to ensure the minimum amount of waiting time for crews.</li> <li>- Crews will be listed on the draw to take to the water with the aim of avoiding crews being exposed to cold, wet or windy weather any more than necessary.</li> <li>- This hazard has a changeable level of risk, so the club strives to minimise the hazard &amp; consequences every time an event is held.</li> </ul>	4	Some complaints in past years.	Hazard controlled to some extent; however the risk remains a high priority.
2.32	Exposure to sun and high temperatures	<ul style="list-style-type: none"> <li>- Zero risk in February / March events.</li> </ul>	1	No reported incidents.	Hazard adequately controlled.
02.4	Sudden illness	<ul style="list-style-type: none"> <li>- Marshalls have radios and can call for First Aid or Emergency Services if needed.</li> <li>- 1<sup>st</sup> aid provision is moved up to the Finish line during embarkation</li> <li>- All safety launches carry a First Aid kit.</li> </ul>	3	Only one minor incident in the last five years.	Hazard adequately controlled.
02.5	Inexperienced coxes or scullers	<ul style="list-style-type: none"> <li>- The course is checked before each race for current hazards.</li> <li>- A coxes and steerers briefing is held prior to each race, to explain these hazards.</li> <li>- The whole course is observed by marshals, safety boats or umpires with 2-way radios. They can provide advice to a steerer, warn officials downstream by radio about badly-steered boats, or hold a crew at the side of the river until the end of a division and then get a safety launch to accompany them back to the landing stages, if they are judged a hazard to others (eg. due to steering equipment problems)</li> </ul>	2	No reported incidents.	Hazard adequately controlled.

## 12.4 During the race

Ref.	Situation Hazard	Control Measures	Risk	Effectiveness Record	Conclusions
03.1	Capsize	<ul style="list-style-type: none"> <li>- All competitors are members of Rowing Clubs affiliated to British Rowing and will have been taught the correct procedures to deal with capsize.</li> <li>- Qualified umpires and Safety Launches marshal the competitors over whole course, including Start &amp; Finish marshalling areas.</li> <li>- All launch drivers will have a RYA National Powerboat Certificate Level 2 and are in radio contact with Race Control, who can summon 1<sup>st</sup> aid if required.</li> <li>- Umpires, marshals and landing stage team are equipped with 13, 25 or 40 metre rescue throwlines.</li> <li>- Only larger boats are allowed to compete – these boats have a reduced risk of capsize.</li> </ul>	4	No reported incidents in last 5 years.	Hazard adequately controlled.
03.2	Collision	<ul style="list-style-type: none"> <li>- All competitors are members of Rowing Clubs affiliated to British Rowing and will have been taught the correct procedures to deal with any capsize following a collision.</li> <li>- Qualified umpires in Safety Launches marshal competitors over whole course, including Start &amp; Finish marshalling areas.</li> <li>- All launch drivers will have a RYA National Powerboat Certificate and are in radio contact with Race Control who can summon 1<sup>st</sup> aid.</li> <li>- No upstream rowing boat movements are permitted on the race course while races are in progress downstream.</li> <li>- Emphasis and advice in the coxes and steerers meeting using annotated map of the river.</li> <li>- 180 metre line of buoys installed diagonally across weir stream channel above Frodsham Sluices.</li> <li>- Other buoys placed at occasional hazards as needed, or hazards removed.</li> </ul>	4	4 minor collisions (none resulting in injury or capsize) in last five years.	Hazard adequately controlled
03.3	Sudden illness	<p>1<sup>st</sup> aid team, normally led by a local doctor, at the boathouses. Can be contacted direct or via Race Control by radio during the race</p> <p>All safety launches carry a First Aid kit.</p>	3	One minor incident in last 5 years.	Hazard adequately controlled.

Ref.	Situation Hazard	Control Measures	Risk	Effectiveness Record	Conclusions
03.4.1	Cold and exposure	<ul style="list-style-type: none"> <li>- Competitors' boats and equipment are checked prior to embarkation, to ensure their fitness to race. This includes clothing appropriate to the weather conditions.</li> <li>- The event will be modified, delayed or cancelled if current conditions or the forecast for the event are considered to cause an undue risk of cold or exposure.</li> <li>- Marshals at the start and safety launches carry exposure blankets to use in an emergency.</li> <li>- Measures have been adopted to ensure the minimum amount of waiting time for crews.</li> <li>- Crews will be listed on the draw to take to the water so as to minimise exposure to cold, wet or windy weather any more than necessary.</li> <li>- Tents will be provided for timekeepers if continuous or heavy rain is forecast.</li> <li>- This hazard has a changeable level of risk, so the club strives to minimise the hazard &amp; consequences every time an event is held.</li> </ul>	3	Some complaints of feeling cold but no significant incidents in the last 5 years.	Hazard controlled to some extent. Minimising the risk remains a high priority.
03.4.2	Exposure to sun and high temperatures	<ul style="list-style-type: none"> <li>- Zero risk in February / March events.</li> <li>- Competitors and coaches are warned that if the weather is hot and sunny, crews must have access to sun-screen, hats and water bottles while afloat.</li> </ul>	1	No complaints.	Hazard adequately controlled.
03.5	Inexperienced coxes or scullers	<ul style="list-style-type: none"> <li>- An extended coxes &amp; steerers briefing is held prior to each race.</li> <li>- Marshalls are stationed along the course and can advise coxes or ask crews to stand by if steering problems are evident.</li> </ul>	2	No reported incidents.	Hazard adequately controlled.
03.6	Taking the wrong course (at Frodsham Cut or at Frodsham Sluices channel)	<ul style="list-style-type: none"> <li>- Coxes and scullers are briefed prior to the race.</li> <li>- Clubs are sent a map of the course as part of the Event Safety Plan.</li> <li>- Crews can evaluate the hazard on their way upstream to the Start.</li> <li>- The 2 cuts each have an Umpire and safety boat at that point to warn Competitors.</li> <li>- These cuts are marked off with lines of red buoys for the race.</li> </ul>	3	No reported incidents.	Hazard adequately controlled.

Ref.	Situation Hazard	Control Measures		Effectiveness Record	Conclusions
03.7	Deterioration of the weather.	- Weather forecasts and radar maps are consulted immediately before taking the decision to proceed with the event. If however the weather deteriorates unexpectedly, then the Race Committee in consultation with the Safety Advisor may choose to curtail, alter, or suspend the race.	3	2 <sup>nd</sup> division cancelled twice in 10 years due to a change in the weather. All competitors were supervised back to the Clubhouse.	Hazard adequately controlled.
03.8	Crew member falling out of boat	- Competitors' boats and equipment are checked prior to embarkation to ensure their fitness to race. - All competitors can swim, and are members of Rowing Clubs affiliated to British Rowing and will have been taught how to deal with capsize or being in the water. - Qualified umpires and Safety Launches stationed at regular intervals supervise the whole course during the race. - All launch drivers will have a RYA National Powerboat L2 Certificate and are in radio contact with Race Control who can summon 1 <sup>st</sup> aid.	3	1 reported incident in 10 years.	Hazard adequately controlled.

## 12.5 Returning from the finish to the landing stages

Ref.	Situation Hazard	Control Measures	Risk	Effectiveness Record	Conclusions
04.1	Capsize	<ul style="list-style-type: none"> <li>- All competitors are members of Rowing Clubs affiliated to British Rowing and will have been taught the correct procedures to deal with capsize.</li> <li>- Qualified umpires at the Finish, marshals in Safety Launch at the A56 Swing Bridge narrows, and at the Sutton railway viaduct to guide competitors back to the landing stages.</li> <li>- All launch drivers have RYA National Powerboat Level 2 Certificate and marshals &amp; drivers are in radio contact with Race Control who can summon 1<sup>st</sup> aid.</li> <li>- There is no stream or current on the 1,200m of canal between the Finish and the landing stages.</li> </ul>	4	No reported incidents.	Hazard adequately controlled.
04.2	Collision	<ul style="list-style-type: none"> <li>- All competitors are members of Rowing Clubs affiliated to British Rowing and will have been taught the correct procedures to deal with capsize.</li> <li>- Extra marshals and Safety Launch in the Finish marshalling area and at bridges to advise crews.</li> <li>- Qualified umpires in Safety Launches follow competitors all the way back to the landing stages.</li> <li>- All launch drivers will have a RYA National Powerboat 2 Certificate and are in radio contact with Race Control who can summon 1<sup>st</sup> aid if required.</li> <li>- Chair of Race Committee will ensure that Weaver Motor Boat Club are notified in advance of Head Race dates, since there will be more rowing boats on the water than normal.</li> </ul>	3	No reported incidents.	Hazard adequately controlled.



Ref.	Situation Hazard	Control Measures	Risk	Effectiveness Record	Conclusions
04.3	Cold and exposure	<ul style="list-style-type: none"> <li>- Competitors' boats and equipment are checked prior to embarkation to ensure their fitness to race. This includes clothing appropriate to the weather conditions.</li> <li>- Marshals at the bridges, and launches following the crews, carry exposure blankets to use in an emergency.</li> <li>- Measures have been put in place to minimise delays due to boats stopping in the Finish marshalling area, at Sutton Railway Bridge and at the landing stages.</li> <li>- Umpires in launches are required to check crews waiting in the finish marshalling and landing stage areas for cold / exposure / illness and evacuate any crew members affected. Launches also stay on the water until all competitors are on land.</li> <li>- This hazard has a changeable level of risk, and the club is striving to minimise the hazard &amp; consequences every time an event is held.</li> </ul>	4	No reported incidents in the last 5 years.	Hazard controlled to some extent; however the risk remains a high priority.
04.4	Sudden illness	<ul style="list-style-type: none"> <li>1<sup>st</sup> aid provision is moved up to the finish line during the race, and First Aid team is based at boathouses.</li> <li>All safety launches carry a First Aid kit.</li> </ul>	3	No reported incidents.	Hazard adequately controlled.
04.5	Inexperienced coxes or scullers	<ul style="list-style-type: none"> <li>- The course is checked before each race for current hazards.</li> <li>- Coxes and scullers briefing held prior to each race to explain hazards.</li> </ul>	2	No reported incidents.	Hazard adequately controlled.

## 12.6 On land after the race

Ref.	Situation Hazard	Control Measures	Risk	Effectiveness Record	Conclusions
05.1	Traffic on the site & parking areas	- Areas marshalled by members of RRC, traffic marshals are in radio contact with each other, and with Race Control.	4	No reported incidents.	Hazard adequately controlled.
05.2	Injury while dismantling boats	- Competitors are generally experienced members of rowing clubs. - Qualified first-aiders / doctors provide 1 <sup>st</sup> Aid.	2	Only minor incidents recorded.	Hazard adequately controlled.
05.3	Chemical incident at Mexichem Chlor works	- Mexichem Chlor (formerly Ineos Chlor) are informed when races are scheduled and we become part of their off-site Emergency Plan. - The event has a public address system in the boathouse / boat-trailer park area and marshals are present to control competitors. - Details of response are provided in the Event Safety Plan sent to all Clubs and Umpires attending.	3	No recorded incidents.	Hazard adequately controlled.
05.4	Traffic incident on M56 motorway.	- The event has a public address system in the boathouse / boat-trailer park area and marshals are present to control competitors.	2	No recorded incidents.	Hazard adequately controlled.
05.5	Fire.	- The event has a Public Address system in the boathouse / boat-trailer park area and Marshals are present to control competitors. - Details of response are provided in the Event Safety Plan sent to all Clubs and Umpires attending. - Fire extinguishers are available - Fire Brigade will be called in an emergency	3	No recorded incidents.	Hazard adequately controlled.
05.6	Inclement weather.	- The Clubhouse, the 'Jim Newcomb' boathouse and other RRC buildings, have space under cover for all anticipated crew/spectator shelter requirements.	2	No recorded incidents.	Hazard adequately controlled.
05.7	Interaction e.g. collision between competitors and spectators.	- Because of the nature of time-trial racing, there are relatively few spectators at this type of event. - One of the prime duties of the Crew Call, Control Commission and stage marshal teams is to warn spectators of the activities of crews. - As much as possible, spectators are segregated from boat movements in the boating area.	2	No recorded incidents.	Hazard adequately controlled.