

Risk Analysis and Management



Location: Cruising the Queen Charlotte Sounds onboard Delphinus, a 13m catamaran or Miss Te Rawa, a 9m mono hull Motuara Island Bird Sanctuary and Ship Cove, all in the outer Queen Charlotte Sounds, Marlborough.
Date/Time:
Personnel: All staff fully trained and up to date in First aid. First Aid kits carried onboard Delphinus and by Education Officer onto Motuara Island and at Ships Cove. Constant communication between all via both cellphone and portable VHF radio.
Passengers:

Analysis/Undesired Event/Injuries		Injuries to limbs, broken bones, head injuries	Man overboard (MOB)	Bodily injuries and panic from damage to the boat	Bruising, lacerations, broken bones from slips, trips and falls	Missing Person	Bodily injury from weather extremes
Causal Factors	People	Children in a foreign environment	Unsafe boat practices by other boats causing collision and MOB Children in a foreign environment	Unsafe boat practices by other boats and skippers causing collision damage	Children in a foreign environment	Children in a foreign environment	Children in a foreign environment
	Equipment	Ropes under strain that can snap or catch limbs		Motor failure, fire onboard or flooding			
	Environment	Boat approaching wharfs and mooring	Hitting rocks, objects or other boats causing collision	Weather extremes	Steps and surfaces on boat, wharf, Motuara Island and Ship Cove. (more so in wet weather) Narrow and elevated walking tracks on Motuara Island.	Children exploring areas of native bush	Weather extremes, high winds, high rainfall, intense heat, rough seas
Risk Management Strategies	Normal Operation	Prior to every wharf approach, passengers are informed by staff to keep clear of both the ropes and the port/starboard side of the boat. Crew continually monitor this.	Highly trained skippers and guides, regular safety drills, being aware of marine debris and other obstacles, constant supervision of passengers, pre-trip warning to stay off the bow while travelling at speed. All children are to wear lifejackets.	No smoking on the boat, any fuel spills cleaned immediately, regular boat maintenance, full safety gear and tool kit on board.	Non-slip surfaces where possible, hazardous areas marked where possible, verbal warning of hazardous areas. Passengers instructed to keep left on the track and to bring sturdy footwear. Walk cancelled if track conditions deemed unsafe.	Adult/Student ratio TBC Depending on how many parents on cruise. 2 E-Ko Tour crew per boat. Constant supervision and continual head count at each location	Passengers advised in advance to bring sturdy footwear, warm clothing (layers), water and food. Inside and outside cabin available for protection, trip cancelled if weather conditions unsafe prior to or during trip.
	Emergency Situation	If minor, crew will treat and stabilize onboard and boat will return to Picton. If serious, crew will do their best to stabilize and skipper will send out appropriate distress message on VHF, channel 63 and 16. Maritime radio will coordinate rescue from there.	Visual contact of MOB maintained by crew, flotation device thrown immediately to help locate MOB and to provide buoyancy aid. Crew to enter water if needed or assist MOB out of the water. Treat for hypothermia. Skipper will send out appropriate distress message on VHF, channel 63 and 16. Maritime radio will coordinate rescue from there.	Crew to calm & direct passengers to muster station (bow/stern) and if necessary, attempt to bring passengers ashore. Skipper to send out appropriate distress message on VHF Channel 63 and 16. If necessary, assist passengers into water to await rescue. Take flares, smoke and EPIRB. Maritime radio will coordinate rescue from there.	If minor, crew will treat and stabilize onboard and boat will return to Picton. If more serious, crew will do their best to stabilize and skipper will send out appropriate distress message on VHF, channel 63 and 16. Maritime radio will coordinate rescue from there.	Report immediately to management, alert Maritime Radio who will coordinate with NZ Police or Search and Rescue. Assist with authorized search.	Treat hypothermia with blankets, warm water and shelter. Treat heat exhaustion with cool water for hydration (and to sponge body down) and shade. Remove excess clothing. Skipper to send out appropriate distress message on VHF Channel 63 and 16. Maritime radio will coordinate rescue from there.