



Introduction

Children are exposed to water in a range of aquatic environments, all with different characteristics and hazardous conditions. Experiences with water can be positive and enjoyable, however, each year a number of children drown or are seriously injured in aquatic accidents.

There are so many different locations in Australia where children can be exposed to water, whether it is at home, on the farm, at the beach, in rivers, lakes or dams, on the harbour, or at your local swimming pool. Although, in general, drowning deaths have been in decline over the past 20 years, it is important to remember that they are preventable and that even one drowning death is one too many. Alarming, the number of drowning deaths in teenagers and young adults is unacceptably high, and the statistics show a sharp spike upwards as children become more independent.

The Royal Life Saving Society – Australia produces a National Drowning Report each year. These can be downloaded from www.royallifesaving.com.au

Why Children Drown

A number of factors have been identified to explain why drowning deaths of children occur:

1. The nature of water environments

There is a certain element of risk in all water environments due to their very nature. Whether they are man-made or natural, a range of hazards will always exist in and around them. The level of risk tends to be greater for open water environments due to their changing and unpredictable elements.

2. Lack of awareness of the dangers of water

Many children are simply unaware of the risks involved in water environments, or how the level of risk changes from one environment to another. It is difficult for children to foresee danger, or understand the possible adverse consequences of their actions.

3. Lack of signage or information highlighting dangers

In some locations there is a lack of information warning people of possible danger. In some cases, it is not until a drowning incident has occurred that it is recognised that such signage should have been installed.

4. Access to water environments is not restricted

There are a number of locations, such as storm water drains, creeks, unfenced pools, or ponds, where access to water is completely unrestricted, so it is simply too easy for children to wander off and innocently play in or near them.

5. Lack of adult supervision

As children get older, the level of supervision generally decreases, and in some cases children are given more responsibility than they have the ability to handle. Older siblings or friends may be given the responsibility of supervising younger children. Adults often have the misconception that children can look after themselves.



6. The availability of rescuers or rescue equipment

As they increase in independence, children may enter water environments alone or without adequate supervision. In addition, many adults do not have the knowledge or skills to plan ahead for, or perform a rescue in, emergency situations.

7. Poor swimming and water safety skills

Many school-aged children have relatively poor or no swimming, personal survival and water safety skills. This may be due to lack of availability of facilities or lessons, lack of practice, financial or cultural factors. Children often have limited experience of a range of different aquatic environments and may not understand their personal capabilities.

8. Children's behaviour

Water is a source of fun and enjoyment but can be extremely dangerous when mixed with children's natural curiosity, poor sense of danger and easily distracted nature. Children can quickly become confused and forgetful and may panic in dangerous situations, rather than make clear judgements. They are readily influenced by peer pressure and may take risks beyond their abilities in order to feel part of a group.



Aquatic Environments – Home

Many aquatic features around the home can pose potential risks to children. Identifying the dangers and reinforcing safe behaviours will help to minimise the risk of drowning.

Bath Time

Drowning can happen very quickly and in a very small amount of water, so it is imperative that safe practices become routine. Interruptions such as the phone ringing or a knock at the door should be ignored. Constant adult supervision is required during bath time. Never leave siblings to supervise younger children. Towels and clothing should be taken into the bathroom before starting to run the bath. When finished, all toys should be removed, the bath emptied, and the bath plug put out of reach of children.

Backyard Pools

Since the introduction of pool fencing laws there has been a substantial reduction in drowning deaths, particularly for those aged 0-4 years. Pool fences provide a barrier to children but must meet the appropriate Australian Standards and pool fencing laws, as well as be maintained regularly. Many drowning deaths have occurred due to faulty fences or gates allowing access, or other breaches of the standards. The gate must be self-closing and self-latching and must never be propped open.

Active supervision by an adult must be provided at all times when children are in and around a backyard pool. This does not mean an occasional glance from a kitchen window, or while doing household chores.

Only a competent adult can quickly react to an emergency situation should it arise.

Toys and aquatic furniture should be removed immediately after use as they can be an attraction for younger children. Do not underestimate young children's ability to find a way of entering the pool area. Outdoor furniture, BBQs, pot plants and climbable trees should not be in the vicinity of the backyard pool.

Buckets and Paddling Pools

Children can drown in as little as a couple of centimetres of water. Buckets and paddling pools should be emptied immediately after use and stored securely away to ensure they cannot be filled by rain. Paddling pools with a depth of 30cm or more require a mandatory pool fence.

Spas

Spas must meet safety fencing regulations and should be covered by a rigid cover when not in use. Underwater swimming in spas is extremely dangerous and there have been a number of cases where children have been trapped underwater by body part entrapment or hair entanglement. There must be two suction outlets for each pump and a cut-off switch for the pump close by in case of an emergency.



Aquatic Environments – Home

Fish Ponds and Water Features

These aesthetic garden water bodies are a great attraction to children, who love to watch the fish swimming or water flowing. To eliminate the occurrence of accidental fall in, fish ponds and water features should be covered with fixed grills and children supervised when playing nearby.

Electricity and Water

Electrical appliances should not be used near water, or left anywhere where they could fall into water or get wet. Switch off and unplug all appliances when not in use, and do not use power or extension leads in wet areas. Examples of dangerous activities include: leaving a hairdryer on, or near, the bathroom basin, using a bar heater in the bathroom, or extending a power cord over the pool area.

Every home should have a Residual Current Device (RCD) or Residual Current Circuit Breaker (RCCB) installed as these can save lives.

Real-life Story - Home Pool Tragedy

In a warning to parents everywhere, the second child in two days has drowned in a backyard pool in NSW. The toddler gained access to the pool when the self-latching mechanism on the sliding door from the house to the pool did not work. She was found face-down in the backyard pool by relatives and was taken to hospital but could not be revived. Parents are being urged to learn CPR and ensure that their pool fences and doors where there is direct access to the pool are properly secured.



Aquatic Environments – Swimming Pools / Aquatic Centres

Although there are relatively few drowning deaths at public facilities, compared to other aquatic environments, incidents that cause injuries and emergencies requiring resuscitation can happen. Introduce rules that promote safe behaviour around the swimming pool and discuss the consequences of not following these safety rules.

Pool Rules

The poolside gets very slippery when wet. It is easy to slip and be hurt if you run around the pool decks or, even worse, unexpectedly fall into deep water and drown. Running, jumping or diving into the pool can result in injuries to other people, serious head or spinal injuries in shallow water, or struggling out of your depth in deeper water.

Lifeguards are not Babysitters!

Parents and carers are responsible for their children at all times during visits to an aquatic facility. Most pools follow Royal Life Saving's Guidelines for Safe Pool Operation which includes the following policies:

- Children under 10 years should not be allowed entry unless under the active supervision of a person aged 16 years or more.
- Parents and guardians should actively supervise their children at all times, and should be dressed and ready for action, including unexpected entry to a pool.

Hygiene and Safety

Simple hygiene practises should be encouraged to minimise the spread of infections and illness. Showering, using the toilet and washing hands before using the swimming pool are good practices for reducing risk. People who have recently suffered, or are suffering from, illnesses such as diarrhoea should avoid using public pools until they are completely recovered.

Diving Boards, Slides and Inflatables

These can be great fun but also pose great danger, particularly for people who are young, weak swimmers, poor swimmers, or are unable to swim. Always abide by the safety rules, which may include height restrictions, participation numbers, swimming ability levels and techniques to use. Only one person at a time should be on a diving board or going down a slide. Ensure that the area of water underneath and around the diving board, inflatable, or exit point of the slide is clear of swimmers.



Aquatic Environments – Swimming Pools / Aquatic Centres

Real-life Story - Public Pools Tragedy

The Keep Watch @ Public Pools program again reminds parents to supervise their children at public swimming pools after the tragic drowning of a young boy. The boy was found on the bottom of a public pool, after wandering away from his father while they were in the change rooms. CPR was administered at the scene by ambulance officers but the child later died in hospital. Pool staff, lifeguards and the community are in shock at the tragedy. Parents are reminded to be vigilant and to keep watch over children at all times.



Aquatic Environments – Beach

Beach safety is particularly important for those not familiar with this aquatic environment, as incidents are often more likely to involve visitors to the area.

Patrolled Beaches

The only beaches to swim at are those that are patrolled. Many beaches are patrolled only over the summer season and at particular times of day. Surf lifesavers patrol the beach and manage emergency situations. Actions such as obeying the directions of the lifesavers, swimming in patrolled areas and reading the signs help to keep people safe.

Swim Between the Flags

Red and yellow flags mark the safest place to swim at the beach. The flags are positioned depending on the conditions on the day and lifesavers patrol the beach area between them.

Signs and Conditions Board

There will often be a conditions board near the surf club which will indicate the conditions on the day. It is important to read this beforehand. Various signs, such as rip currents, bluebottles, or even beach closed, will alert you to the dangers. Signs will also advise you where to use watercraft, surfboards or body boards and where the safe places are to swim. If you are unsure, ask a lifesaver.

Waves

Open-water waves are much larger, stronger and more regular than those on inland waterways. The size and strength of waves is determined by the strength and duration of the wind and distance over which it blows. There are three main types of waves: plunging, spilling and surging.

Rip Currents

Rips are fast-flowing and strong runback currents that run out to sea and are often the cause of drowning incidents as they can take swimmers quickly from shallow water to deep water several metres offshore.

To recognise a rip, look for: discoloured water, waves breaking on both sides of the rip, or debris floating with the current.

If caught in a rip current: remain calm, go with the rip, float and wave for attention. Never attempt to swim against the rip current.



Aquatic Environments – Beach

Water and Sand Conditions

Due to constantly moving water the beach floor changes and can become hazardous. One day it may be smooth, but on the next there could be a deep hole or sandbar. Submerged objects may be hidden but as the tide goes out they become exposed. It is important to check the water and sand conditions prior to entering the water or diving under waves, because you could risk injury, or find yourself dangerously out of your depth.

Sun Safety

As there is little protection from the sun at the beach it is important to take adequate precautions. Too much exposure to the sun can damage your skin or result in sunburn, heat exhaustion or dehydration. Taking a sun shelter or beach umbrella to protect against the direct heat of the sun is a great idea. Wearing a hat, sunglasses and long-sleeved clothing, as well as using a high-rating UV protection sunscreen, are all good protective measures.

Real-life Story – One Dies in Sea Drama

A woman has died after being pulled from the water at an unpatrolled beach near Melbourne. The 36-year-old woman was one of seven people, including four children, who were swept out to sea when they were caught in a rip. Paramedics tried to resuscitate her for about an hour before she was airlifted to hospital but she died a short time later. The other rescued people were also taken to hospital suffering minor injuries and shock.



Aquatic Environments – Rivers

Currents and Tides

Strong-flowing currents can easily sweep a person downstream.

Constantly moving water changes the river bed and causes erosion of the banks. Conditions can change rapidly, so while the water might have been shallow one day, a deep hole could exist the following day. Currents move debris in the flowing water.

Entry

Jumping and diving into rivers is extremely dangerous due to unknown depths, changing conditions, murky water and submerged objects. Always check the conditions before entering and use a gradual feet-first entry.

Swimming

The pressure of moving water can be powerful and constant, so swimming in rivers can be dangerous even if you are a strong swimmer. Swimmers can be pulled underwater by the current or dragged into fast-flowing water. If caught in a current, float on your back in a half-sitting position, with your feet forwards, to avoid injury to your head and try to manoeuvre your body to the side by sculling your arms.

Unstable Banks

Unexpected falls into water can occur because river banks can be very soft and unstable and overhanging banks can suddenly crumble. River banks can also be very steep.

Water Crossings

Check with local authorities and if in doubt err on the side of safety and caution rather than take any risks. Do not drive across flowing water as cars can easily stall in water or be carried away by the current. During floods, road surfaces could have been washed away, but this may not be visible beneath the water surface.

Real-life Story - Family Flood Tragedy

Eight people have drowned in New South Wales during widespread flooding caused by storms. In a tragic incident, five members of one family were swept into a swollen creek when the submerged road they were driving on collapsed beneath their car and their vehicle fell into a waterway. Royal Life Saving again warns all Australians to never drive across or swim in floodwaters due to the hidden dangers they pose.



Aquatic Environments – Lakes

Weather Conditions

Poor weather conditions and wind can quickly change the calm appearance of lakes. There is little protection in the lake environment from strong currents and rough waves and the waves are often close together, making it difficult to manoeuvre when swimming or using unpowered watercraft.

Characteristics

Cold water is often a feature of lakes, particularly those at high altitudes, those with deep water and those fed by cold mountain streams. Lakes can often be murky and their depth unknown. The lake beds can be uneven and soft due to river entry points depositing silt. Thick reeds and hidden hazards under the water can also be a dangerous feature of lakes.

Real-life Story - Boat Capsizes on Lake

A father and his son have drowned in rough conditions while boating on a lake. The tragic incident demonstrates the importance of wearing life-jackets as neither the father nor son was wearing one. The weather and water conditions were poor and it appears that their lightweight boat has capsized. The poor conditions hampered rescue attempts.



Aquatic Environments – Farms

Children living on and visiting farms are at risk of drowning due to accessible water hazards. Many farms are workplaces too, so parents may become busy and distracted and supervision can easily be reduced or forgotten. Awareness of water dangers on farms is important, as is establishing routines and behaviours to keep children safe.

Child-safe play area

A securely fenced house yard or a child-safe play area with childproof gates and latches, combined with active supervision will help to prevent drowning on farms. Child-safe play areas, equipped with appropriate and appealing children's toys and equipment, should be easily observable by parents/carers and be regularly maintained to ensure that children remain safe and have no access to water.

Dams

Dams provide water for farm animals and other agricultural, garden and domestic purposes, so they are unable to be fenced. Some dams have very steep sides and the banks are muddy and slippery. The water in dams is very cold and murky, and there is often thick vegetation. It can be relatively easy for young children to get into the dam but very difficult for them to get out.

Water Tanks

Water tanks collect rainwater and many farmhouses are supplied with water from them, so they are located close to buildings. Water tanks are very deep and have steep, slippery sides, making it extremely difficult to get out of them. To restrict access by children, ladders should not be stored against the outside of the tank.

Irrigation Channels

The banks of irrigation channels are steep and slippery and irrigation pumps make the water flow fairly fast. The water is often very cold and murky. These channels are very unsafe places for swimming, particularly around the pumps.

Water Troughs and Sheep Dips

Young children have drowned in water troughs and sheep dips. Water troughs have steep sides and sheep dips contain a mixture of toxic chemicals and water, so they are both extremely unsafe places to play.



Aquatic Environments – Farms

Real-life Story - Boy Drowns in Farm Dam

A family is grieving after their toddler son drowned in a dam on their family farm. The couple's only son drowned when he wandered off from the main house and walked a kilometre to get to the dam. The father found his son two hours later in the dam and dragged him to shore before starting CPR.

Ambulance officers were called but the boy was unable to be resuscitated. This tragic case highlights the importance of supervision and secure child-safe play areas on farms to prevent children from wandering off, and terrible tragedies such as this from occurring.



Aquatic Activities

People are drawn to water because it is a source of curiosity, fun and enjoyment. The various aquatic environments of Australia allow us to enjoy activities including swimming, sailing, water skiing, fishing, boating, wind surfing, surfing and body surfing at open water and surf beaches and in rivers, lakes, dams and creeks, backyard pools and aquatic fun parks.

However, these aquatic environments can also be dangerous and hazardous, even when safe practices are used. During our teenage years further dangers can be generated by an increase in risk-taking behaviours. Consumption of alcohol, drug taking and peer pressure can all cause individuals, particularly in this age group, to increase the risks they take when participating in aquatic activities.

Real-life Story - PFD Saved My Life

A Queensland man has paid tribute to his Personal Flotation Device – saying it saved his life. The 34 year old was boating off the coast of Mackay when an engine problem caused his boat to turn sharply and he fell overboard. He spent five hours in the ocean before being rescued by a passing boat. “I would have drowned for sure, had I not been wearing my lifejacket. I can honestly say that it saved my life and I would encourage everyone to wear one when they are out on the water”. Water safety groups also remind people that a lifejacket can also be thrown to help someone who is in trouble in the water.



Aquatic Activities – Boating

Boat Rules

Boating rules help to keep all those using the waterways safe. Keep watch for other watercraft and for swimmers. Follow the speed limits and learn the rules of the water. Powered vessels should give way to sailing craft. Travel at a safe speed, allowing your vessel to be stopped in time to avoid any sudden dangers.

Personal Flotation Devices (PFD)

Personal Flotation Devices are often called lifejackets and should always be worn when boating. They help keep people afloat but it is important to ensure that they are appropriate for the activity and the correct size for the wearer.

Safety Equipment

Safety equipment is to be carried on board pleasure craft two nautical miles from the coast and outside sheltered waters. It is recommended that safety equipment, for example, Emergency Position Indicating Radio Beacons (EPIRBs), is carried on board at all times.

Safe Practices

Always tell someone where you are going and the estimated time of your return, so they can raise the alarm if you have not returned. Never go boating alone. Check the weather conditions before setting off. Take only the items that are necessary for your trip and never overload your boat. Before boarding the boat make sure it is secured to a mooring or jetty and is as stable as possible. When the boat is moving, sit in the correct seating areas, not on the bow.

Boat Ramps

Swimming near boat ramps is dangerous. It is difficult for others to see people swimming or playing in the water when reversing down a boat ramp to launch their boats.

Boat Capsizes

If your boat capsizes and stays afloat, it is always best to stay with the boat as it will be easier to see. Climb onto the hull or cling to the side, remain calm and wait to be rescued. If there are other boats around, or you are visible from the shoreline, attract attention by yelling for help and waving your arms.



Aquatic Activities – Fishing

Fishing is a popular hobby for those who live near waterways, but can be a risky one. There are a number of forms of fishing which all have particular risks. Rock fishing is one of the most dangerous sports in Australia.

Appropriate Clothing

Wearing appropriate clothing for the weather and taking a change of clothes is recommended. As you are often out fishing for long periods be sun smart and wear a hat, sun cream, sunglasses and long-sleeved shirt. Lightweight but protective clothing in bright colours helps to increase your visibility for early morning and late evening fishing. Non-slip footwear or cleats should be worn to reduce the likelihood of slipping. Always wear a PFD.

Location

Check the location where you plan to go fishing so that you are aware of any conditions and factors that may affect your safety. Conditions change regularly, so a favourite fishing spot could become dangerous. Avoid areas such as weirs, bridges and slippery rocks and keep your eye out for changing water and weather conditions such as discoloured water, rising waters and wind. If visiting an area you are not familiar with, check with the locals for safe fishing locations.

Safe Practices

Always fish with other people so there is someone else available should an emergency arise. Inform someone where you are going and when you expect to return. Take safety equipment such as a line and float to use in a rescue if required. Never turn your back on the sea, and watch the waves while fishing. Don't take risks in order to get the biggest or best fish! Drowning deaths have occurred when people are distracted by taking photos of the fish they have caught.

Real-life Story - Rock Fishing Tragedy

A man has drowned while rock fishing. The man, who was fishing from slippery rocks with four friends, drowned after a wave knocked all five people over and washed him into the water. This incident serves to remind people that rock fishing is a dangerous sport. In order to minimise their risk of drowning when rock fishing, people should always wear a PFD, check conditions before they choose a location, and never rock fish alone.