

COASTAL WATER



WATER INSIGHT, SAFETY & EDUCATION





As an island nation, we're lucky to have easy access to the coast, and all the opportunities this brings.

Swimming, surfing, diving, sailing, boating, angling, coastering... it's all on our doorstep.

What better reason to learn the basics of water safety? It means we can enjoy everything our coastal waters have to offer with confidence.

There are words you'll regularly hear about the sea that many people don't actually understand. After you've learned their meanings, see if your parents have heard of them – and then ask them what they actually mean.

It's amazing how many people have heard of a 'rip current' or a 'neap tide' but don't actually know what they are. But first – the most important thing to remember by far is that...

1) KNOW THE SEA

Here are key facts to know about the sea that can affect safety:

IT'S SALTY AND COLD

Sea water is roughly 3.5% salt. This makes it denser than the fresh water in rivers, ponds and lakes. It also means the sea doesn't heat up or cool down as quickly. As such, the seas around Ireland can be very chilly, even in the summer. This means there's a danger of Cold Water Shock and / or Hypothermia:

- Cold Water Shock is the sudden hit of cold water. This can affect breathing and make you panic.
- Hypothermia is when your body gets too cold. This will affect your heart, lungs and other important organs.

IT HAS TIDES.

The sun and moon's gravity pulling on the Earth makes sea water move. So every six hours or so, the tide 'ebbs' (drains away from the shoreline). Six hours later, it 'flows' (comes back in again).

This can cause dangers. Let's say the tide has ebbed and you go out to an exposed rock. You lose track of the time and before you know it, the tide has flowed back. You're surrounded by water and stranded!

Important to know:

1. Water moves far faster in the middle of a tide, whether it's ebbing or flowing.
2. The times that tides ebb and flow change daily. Each day, the tide is in / out approximately one hour later than the day before.



**THE SEA IS MORE POWERFUL
THAN ANY PERSON OR BOAT.
ALWAYS RESPECT IT!**



IT'S WINDY

The direction of the wind affects the water. An 'onshore wind' means the wind is blowing from the land towards the sea. This creates 'chop' in the water. So the more onshore wind there is, the choppier the sea gets.

'Offshore wind' blows towards the land. So the water will be less choppy - but it could blow you out to sea faster.

IT HAS 'SWELLS'

These are what appear to be rolling lumps of water out at sea. When a swell hits the shoreline, it breaks as a 'wave'. The bigger the swell, the bigger the wave. And the more distance between swells, the more powerful each one is.

The direction a swell travels in affects its power. So if you're on a beach facing south west and the swell is coming from that direction, it will be more power than if your beach is facing north.

IT HAS RIP CURRENTS

A rip current is water that's travelling out to sea in a powerful stream. It flows onto the beach and it is then sucked out again faster than the other water around it. This can carry you out into deep water. Check out this video which explains how rip currents work:

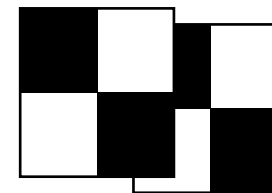
https://www.youtube.com/watch?v=KWe5g6dt_ug

**IMPORTANT: IT'S HARD TO JUDGE CHOP FROM THE SHORE.
THE CHOPPIER THE WATER IS, THE HARDER IT IS SWIM OR MOVE SAFELY.**



TWO RED WITH YELLOW FLAGS

It's safe to swim and bodyboard between the two flags



TWO BLACK AND WHITE FLAGS

You can't swim between these flags. It's only for surfers and windsurfers.



RED FLAG

It's never safe to swim here at any time.

2) KNOW THE BEACH

From sand castles to surfing, there are loads of ways to enjoy the beach.

Here are some good tips, depending on what you're doing:

GOING IN THE WATER FOR ANY REASON?

If you go in the water, make sure there's a lifeguard on duty. Flags will tell you if there's a lifeguard around and if it's safe to enter the water:

- Red & Yellow Flags: if you can see two sets of Red and Yellow flags flying, it's safe to swim in the stretch of water between them. (But still be careful!)
- Red Flag only: it's not safe to enter the water.

An aerial photograph of a beach with a prominent rip current. The water is a vibrant turquoise color, and the rip current is a darker, more turbulent stream of water flowing out to sea. The beach is a wide, sandy expanse of light tan color. In the foreground, there are several large, gnarled, and leafless branches of a tree or shrub. In the background, there is a parking lot with many cars and some greenery.

**A RIP CURRENT IS WATER THAT'S
TRAVELLING OUT TO SEA IN
A POWERFUL STREAM**



SURFING

Like riding a bike, surfing can be tricky at first. But when you get it right you never want to stop. The important thing to know about surfing is that it's not something you should ever do alone. A good surf school will teach you as much about safety and how the sea behaves as how to stand on a board. But three of the key things to remember are:

1. Never surf alone.
2. Make sure your equipment (especially the leash connecting your leg to the board) is in good condition.
3. Try to always stay with your board if you get in trouble.

TAKING A DIP

You're only up to your waist in water. Your feet are on the bottom. So you're not swimming.

Taking a dip may seem safer than swimming out into the sea – but you still need to be careful. You need to be careful of rip currents that can knock you off your feet. And you need to be careful where you put your feet – be sure there aren't any sudden drops. Most importantly, have fun, but don't mess. What starts as horseplay has very often ended up in hospital!

3) KNOW CLIFFS, ROCKS AND PIERS

COASTEERING

Coasteering is exploring a rocky coastline by climbing, jumping and swimming. It can be a real buzz – but only if you stay safe. This means wearing the correct safety gear. It means sticking to safe locations. And it means following the instructions of experts.

Since coasteering involves climbing over wet rocks, there's a high risk of slipping. That's why wearing a helmet and suitable footwear is essential. Jumping into the sea is also a huge component of coasteering. But how do

you know there isn't a rock out of sight under the surface? You don't know – but your instructor does. So only jump when and where you're told it's safe.

PIERS & HARBOURS

The water around piers and harbours is for boats not people. There's only one thing to remember about jumping off and swimming around piers – you shouldn't! And it doesn't matter if your friends tell you it's OK, you still shouldn't. If nothing else, think about all the oil and muck leaking from boats. Then think about the rubbish and debris that ends up in harbours.

When you're on a pier, that's where you should stay - and while you are there, check that there's a ringbuoy. If one is missing, report it at **WWW.RINGBUOY.IE**.

4) KNOW THE OPEN OCEAN

The open ocean is an incredible place – it's also a place where you need to always put safety first.

Weather conditions can change quickly and if you're not prepared, you can find yourself in trouble very quickly. The most important thing you can do to stay safe is listen. When you go out to sea in a boat, listen and learn from the people operating the boat before the journey starts. They will tell you what to do if there's an emergency and where all the safety equipment is stored.

At the same time, use your common sense – if you notice that a bit of equipment is damaged or there's something you're worried about, don't keep it to yourself.

REMEMBER - AT SEA, DURING AN EMERGENCY, IT'S TOO LATE TO START LEARNING. LISTEN TO SAFETY BRIEFINGS. LEARN HOW TO USE SAFETY EQUIPMENT.



- 1 THE SEA IS ALWAYS MORE POWERFUL THAN YOU.**
- 2 THE SEA AROUND IRELAND IS COLD - BEWARE OF COLD WATER SHOCK AND HYPOTHERMIA.**
- 3 KEEP AN EYE ON THE TIDE AND DON'T GET STRANDED.**
- 4 IT'S HARD TO JUDGE HOW CHOPPY WATER IS FROM THE SHORE.**
- 5 A SWELL'S POWER DEPENDS ON YOUR LOCATION AND HOW MUCH DISTANCE THERE IS BETWEEN IT AND THE NEXT SWELL.**
- 6 RIP CURRENTS ARE FAST MOVING STREAMS THAT CAN CARRY FAR OUT TO SEA. TO ESCAPE ONE, SWIM PARALLEL TO THE SHORELINE, NOT TOWARDS IT.**
- 7 YOU NEED THE RIGHT EQUIPMENT AND EXPERT GUIDES TO GO COASTEERING.**
- 8 ON THE OPEN OCEAN - LISTEN, FOLLOW INSTRUCTIONS AND KNOW WHAT TO DO IN AN EMERGENCY BEFORE YOU SET OFF.**



SURFING

*As this video shows,
surfing is a fantastic way to enjoy the sea:*

RISK ASSESSMENT:

- Was his surfboard in good condition?
- Were the weather conditions OK?
- What might have happened to Dave if he didn't get help?
- He had some surfing experience - so was he OK to surf on his own?

ABILITY ANALYSIS:

- Did Dave the surfer have enough experience?
- Did he do anything to stay safe?
- Did Dave have a plan to deal with any problems?

But this one explains how things can go wrong – and what to be careful of.





PIERS & HARBOURS

Take a look at this video. It describes an incredible real-life rescue story and shows how dangerous harbours and piers can be - especially for anyone who can't swim:

RISK ASSESSMENT:

- According to Martin, how do boats add an extra risk to the water in Passage West?
- Why did the time of the year make the water even more dangerous?
- Were the children old enough to be left alone by the water?
- Is a pier a suitable place for young children to play?

ABILITY ANALYSIS:

- Would it have been better if the children could swim?
- Should everyone do what Martin did and jump in?
- What might have happened if Martin hadn't looked out his window at the right time?

Also to discuss:

TAKING A DIP

Even if you think you're just taking a dip, you need to be careful. The three surf instructors in this video explain how a teenage GAA team was cooling off in the sea – but got caught by a rip current:

RISK ASSESSMENT:

- Do you think the GAA team asked anyone if the place they chose was safe to take a dip?
- Is a rip current useful or dangerous – or both?
- Can you be more careful if you're just going for a dip?

ABILITY ANALYSIS:

- Were they more careless because they weren't going for a full swim?
- Did they know that they should swim parallel to the shoreline if they were caught in a rip current?

COASTEERING

Take a look at this video and see if you can spot what's being done by this group to stay safe while coasteering:

RISK ASSESSMENT:

- List three risks the group faced
- What safety equipment were these people wearing?
- Do you think they were being supervised?
- Why did they wear shoes and a helmet ?
- Why did they wear a lifejacket?
- Why did they wear a helmet?
- Why did they wear a wetsuit?

ABILITY ANALYSIS:

- If some of the group were strong swimmers, did they need life jackets?
- What might happen if the group was unsupervised?
- Is this an activity that only adults can do?

OPEN OCEAN

You're on a break in Dingle and your family booked a deep-sea fishing trip. Before you step on the boat, the captain and crew explain what to do if there's an emergency. But you don't think you need to know all this. So what if there's an eight person inflatable lifeboat at the back? Who cares if it's launched by pulling the red lever or automatically inflated if submerged in water?

The crew demonstrates the safety equipment. Everyone gets a properly fitted life jacket that matches their weight and height. You're told make sure the EPIRB (look it up!) attached to every lifejacket doesn't get wet! You also see where the waterproof jackets and trousers are stored. You're then invited into the cabin where there are screens, radars and radios. The engine purrs into life and off you go...

RISK ASSESSMENT:

- Was the safety briefing worth the time it took?
- Does the equipment look up to date and well-cared for?
- Should you prepare for good or bad weather on the seas around Ireland?
- What are the main dangers facing the boat?
- What would happen if the boat lost power and began to take on water?

ABILITY ANALYSIS:

- Would you know what to do if there was a problem with the boat?
- Are you sure the crew could keep you safe in an emergency?

