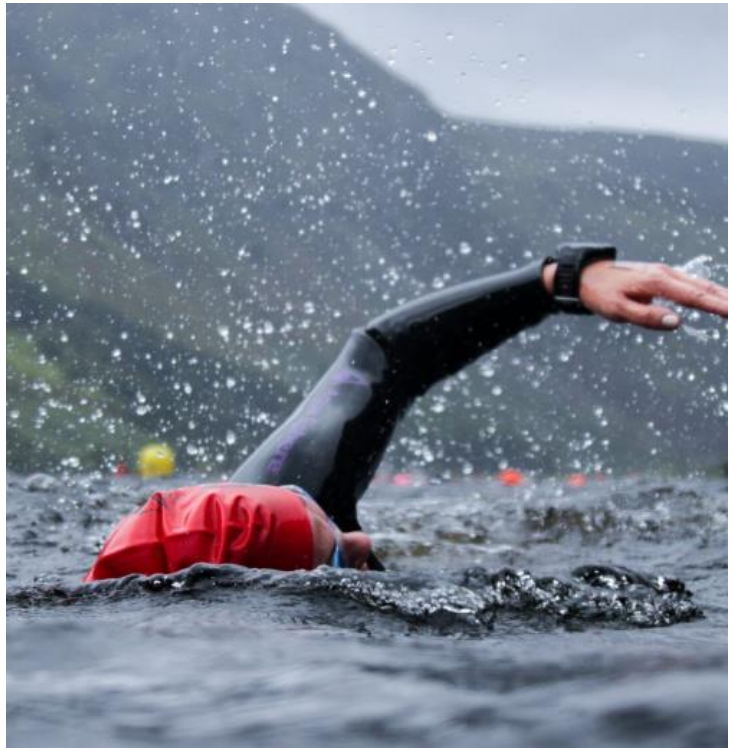
WSI Open Water Swimming

Safety first!

What Open Water Swimming Offers

- Open water swimming has both physical and mental health benefits for us all.
- Many people describe the feeling of intense satisfaction after plunging into cold water. It leaves the body tingling all over and helps clear the mind of worries and anxieties.
- Year-round swimmers are adamant that the sea has the potential to alleviate the effects of a number of physical ailments including arthritis, chronic pain and lots more.



Take The Right Safety Precautions

- Open water swimming can be an enjoyable experience when people have the right safety knowledge and preparation.
- It is important to remember, there are considerably more dangers in winter than in summer months.
- If you see someone in difficulty, please dial 112 and ask for the Coast Guard.

Open Water Swimming

- The popularity in open water swimming in Ireland has been growing over the years.
- During the Covid-19 pandemic, many people who normally swam only in swimming pools took to beaches rivers and lakes.
- Many had no prior knowledge of the different issues that surround open water swimming: most had learned to swim in a different environment
- This module hopes to act as a guide to Open Water Swimming with the intention of keeping people safe.

Swimming Pool v Open Water

- Learning to swim in a swimming pool may not prepare someone adequately for swimming in other water environments outdoor
- While the bulk of teaching takes place indoor, the bulk of drownings occur outdoor
- Put simply, learning to swim in an outdoor environment is different to learning to swim in an indoor environment.
- INDOOR DOES NOT EQUAL OUTDOOR – ADAPTATIONS NEEDED FOR SAFE SWIMMING

SOME DIFFERENCES…

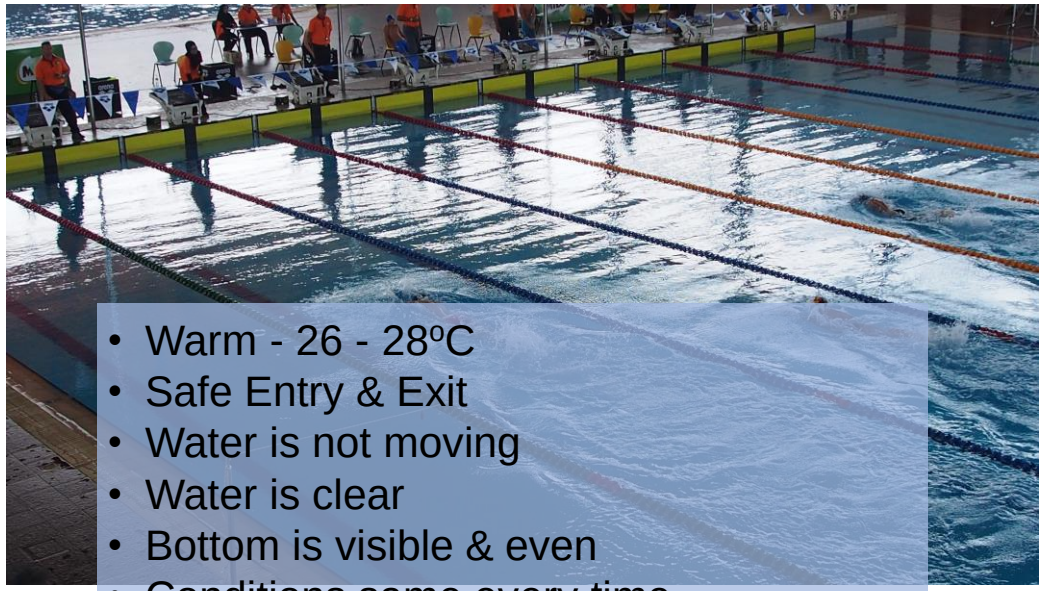
Swimming Pool

- Treated, comfortable temp.
- Clarity
- Lifeguards / supervision
- Entry / exit points
- Depth knowledge

Outdoor environments

- Limited information available
- Cold, variable temp.
- Sudden depth changes
- Waves, rips, currents, weather events
- Wildlife

Open Water Swimming



- Warm - 26 - 28ºC
- Safe Entry & Exit
- Water is not moving
- Water is clear
- Bottom is visible & even
- Conditions same every time
- Lifeguards
- changing in warm & dry
- Humans are the only other wildlife

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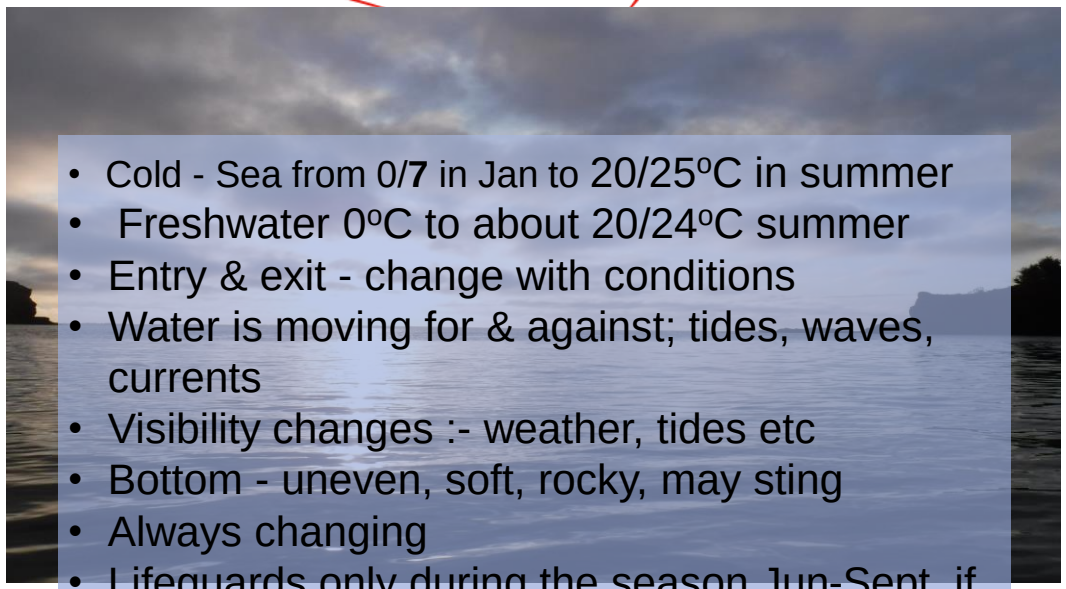


- Cold - Sea from 0/**7** in Jan to 20/25ºC in summer
- Freshwater 0ºC to about 20/24ºC summer
- Entry & exit - change with conditions
- Water is moving for & against; tides, waves, currents
- Visibility changes :- weather, tides etc
- Bottom - uneven, soft, rocky, may sting
- Always changing
- Lifeguards only during the season Jun-Sept, if at all.
- Changing in the elements
- Humans, seals, Jellyfish, swans etc

Open Water Risks

Weather Conditions: (check local weather in advance):

Calm Sea

Rough Sea

Open Water Risks

Currents

- These will often be influenced by the weather conditions and will also be different in Sea, Rivers and lakes. Beaches can present different types of currents.
- Local knowledge is important.

Rip Currents

- As waves travel from deep to shallow water, they will break near the shoreline. When waves break strongly in some locations and weakly in others, this can cause circulation cells which are seen as rip currents: narrow, fast-moving belts of water traveling offshore. They are particularly dangerous for weak or non-swimmers.

Open Water Risks

The RIP Current

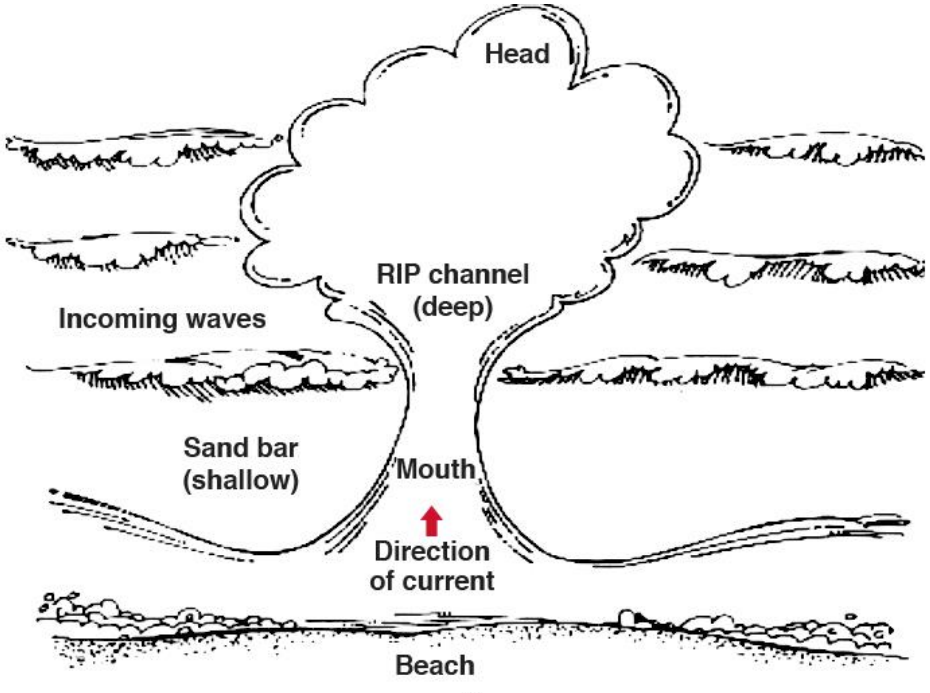
- Sandy / muddy discoloration of water.
- Foam on the surface extending beyond the break.
- Gap in breaking waves in vicinity of rip.
- Waves breaking on both sides of the rip.
- Seaward floating debris.
- A rippled appearance, when the water around is generally calm.

Open Water Risks

RIP Currents

Open Water Risks

The RIP Current



Open Water Risks

Longshore / Lateral Current

Open Water Risks

Wave Profile

Spilling /
Rolling wave

Open Water Risks

Wave Profile

Open Water Risks

Wave Profile

Tidal Cut -off

- Beware of sandbanks, rocky outcrops, rock pools etc.
- These are often only visible at low tide.
- Serious danger of tide coming in behind you, cutting of safe return to the beach.

Open Water Risks

Tidal Rivers

Low Tide

High Tide

Open Water Risks

- Wild animals (seals, swans)
- Other dangers to be aware of: At low water you are more likely to be stung by a Weever fish.
- In fresh and salt water, you are also more likely to slip or fall on surfaces with algae on them both e.g. seaweed on slipways.

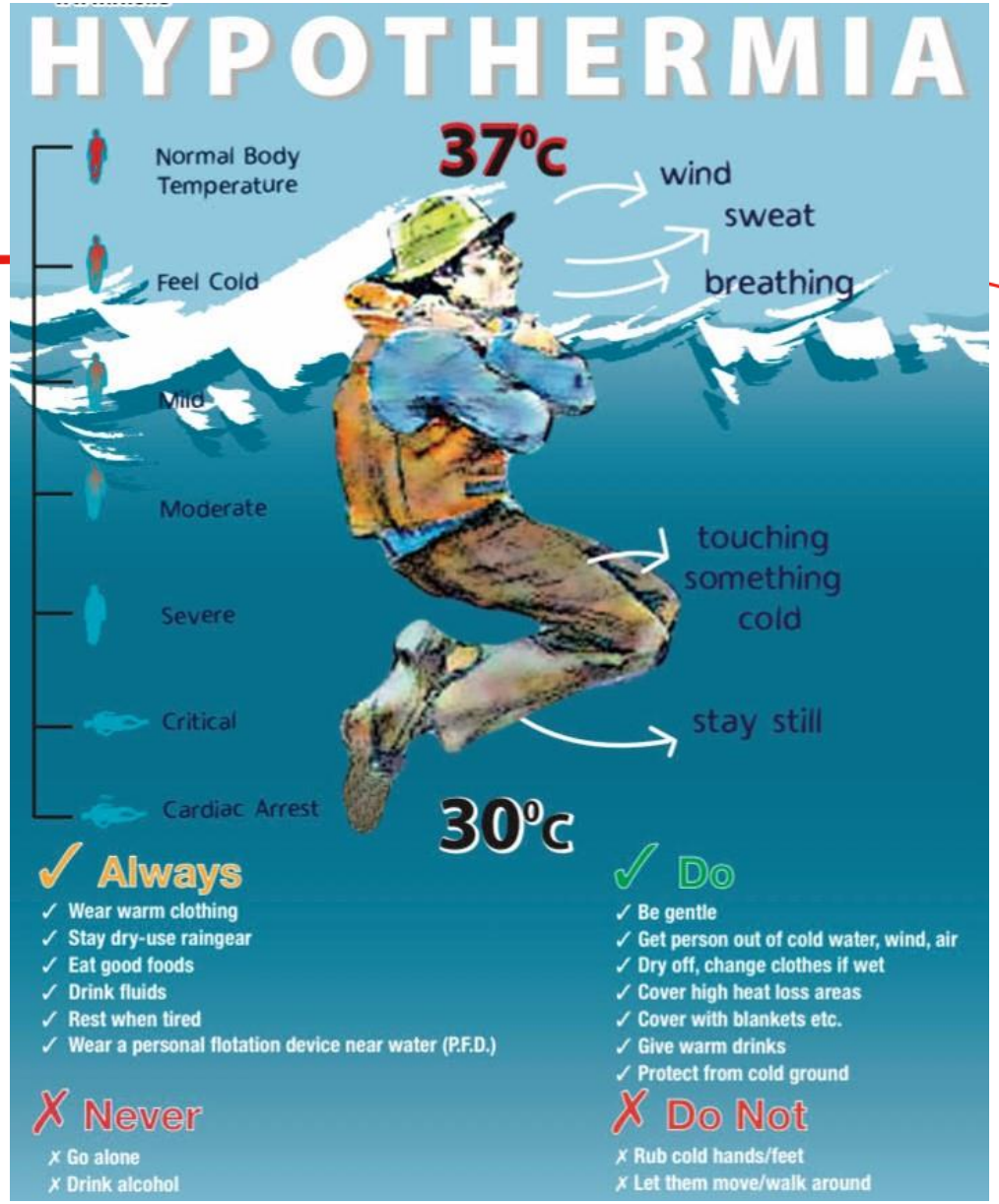
Open Water Risks:
Waves: Entry & Exit

Safe Entry & Exit

Probably safe

Unsafe

IF IN DOUBT, STAY OUT!


HYPOTHERMIA
Normal Body Temperature
37°c
wind
sweat
breathing
Feel Cold
Mild
Moderate
touching something cold
Severe
Critical
stay still
Cardiac Arrest
30°c
✓ Always
✓ Wear warm clothing
✓ Stay dry-use raingear
✓ Eat good foods
✓ Drink fluids
✓ Rest when tired
✓ Wear a personal flotation device near water (P.F.D.)
✗ Never
✗ Go alone
✗ Drink alcohol
✓ Do
✓ Be gentle
✓ Get person out of cold water, wind, air
✓ Dry off, change clothes if wet
✓ Cover high heat loss areas
✓ Cover with blankets etc.
✓ Give warm drinks
✓ Protect from cold ground
✗ Do Not
✗ Rub cold hands/feet
✗ Let them move/walk around

Cold Water Hazards:
Cold Shock

- May occur in Irish waters at anytime of the year.
- Gasping, & increase in heart rate
- Enter gradually and gain control of your breathing before moving deeper, throw some water down the back of your neck to help prepare your body for immersion; this helps reduce the risk of cold-water shock.
- Do not try to swim until you can control your breathing.
- Start open water swimming in a wetsuit.

Cold Water Hazards: Acclimatisation

- Prevents/reduces cold shock response.
- Start in the summer when the water temperature in Ireland is somewhere between 14° and 18° Celsius.
- Start in a wetsuit.
- Start by dipping, get your body submerged and get out.
- Gradually increase the time, don't push it.
- Dip/swim regularly.
- Work at your own pace.

"**Swim within your depth – stay within your depth**"

Cold Water Hazards: After Drop

- Any swimmer, even those who are acclimatised, strong and experienced, can get into trouble in open water. (Shivering starts at lower temperature).
- Core temperature may continue to drop after getting out of the water.
- The effects may be noticed about 5 minutes after leaving the water.
- Reduce/Avoid by:
  - Get wet gear off as quickly as possible.
  - Layers of warm, dry clothing
  - Warm drink, eat something sweet
  - Base swim on time

Open Water Risks

- Cold Water Shock/ Cold Incapacitation
- Increased stress of Heart function on entering cold water.
- Sea water can vary from 0° in the Winter to 25° Celsius in a heat wave, while freshwater can vary from as low as 1° in the Winter to 27° Celsius in a heat wave. Saltwater gives you increased buoyancy in the water so it is easier to stay afloat.
- Wet suits are recommended for swimming in cold water.

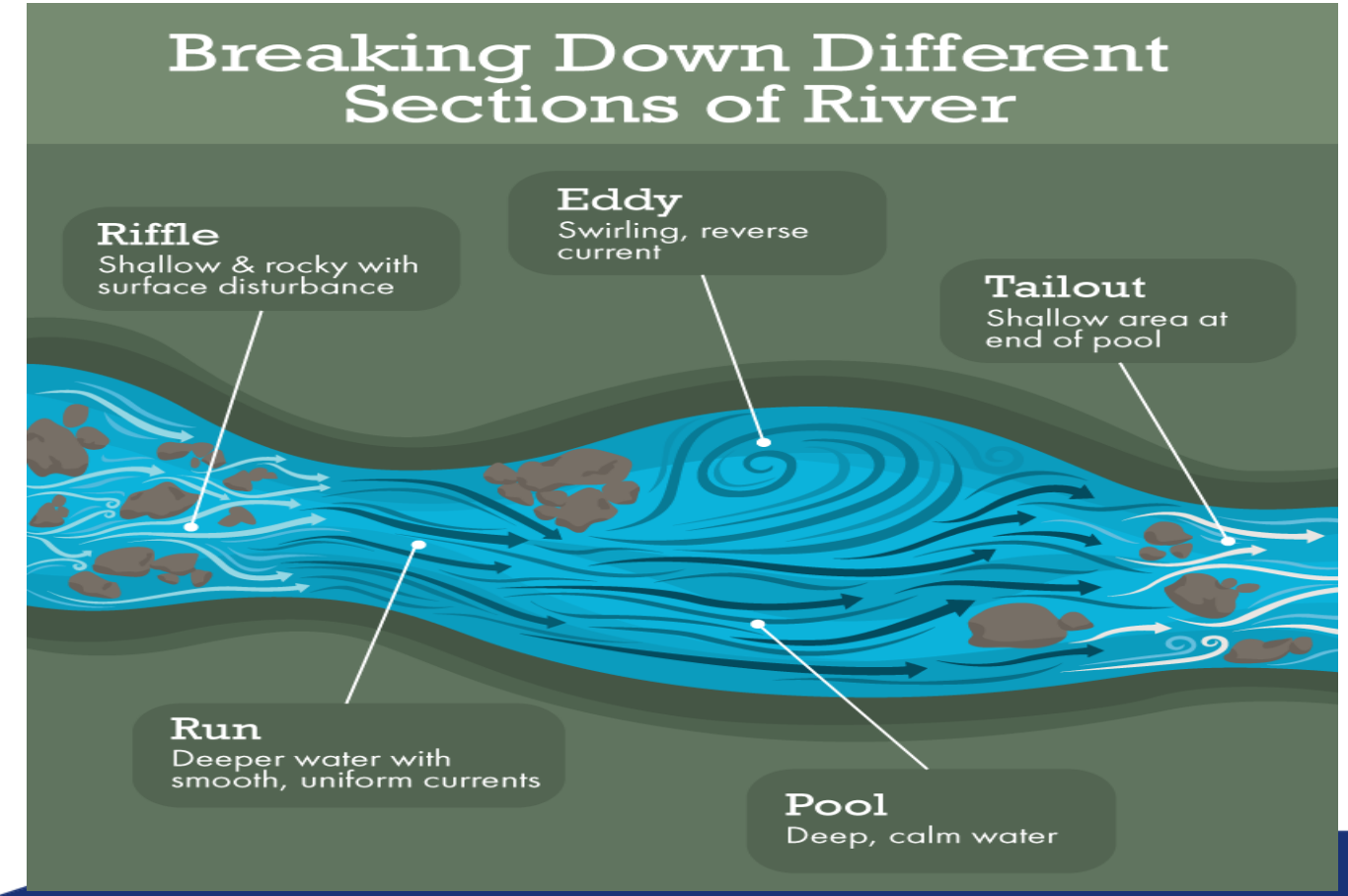
Open Water Risks

- After drop: After-drop refers to the decline in your core body temperature **after** you have got out of the water. This can last for up to 30 minutes, leading to **hypothermia**.
- Group swimming (different swimming abilities of participants will often lead to splitting in the groups).
- Water quality or clarity (health issues and visibility).

Open Water Risks

Open Water Risks

River profile



Open Water Risks

River Swimming Area

Open Water Risks

River Swimming Area in Flood

Open Water Risks

River Swimming Area in Flood

Stroke Adaptation

- Teaching correct Stroke technique in detail may not be paramount in open water swimming courses, it is important to adapt a stroke that you are comfortable with.
- For example:
  - Breaststroke with head up.
  - Frontcrawl, breathing to one side away from wind.
  - Back crawl.
  - Floating.

Group organisers' ability to keep control

Key Guides:

- Floatation bags.
- Buddy System.
- Stay in your own depth.
- Swim parallel to shore.
- Never Swim Alone.

Final thoughts

- Cold water swimming can be dangerous.
- Do not underestimate the danger of the cold or overestimate your abilities.
- **<u>If you are an inexperienced swimmer get lessons.</u>**
- Use the pool to improve stamina and technique.
- **Most importantly:**
    - **Enjoy the buzz.**
    - **Make friends.**
    - **Stay safe.**