

# Beach Safety

Below is an overview of the activities Beach Risk Game & Decision Making Quiz (RNLI Ltd.) to incorporate information learned from Dr. Herrington's presentation and subsequent discussion.

## Lesson Overview

Students learn about beach safety and how to make good decisions that will keep you safe.

## Lesson Rationale

Many students visit the shore with their families during the summer. Unfortunately, there are many risks and potentially dangerous components of the beach, including rip currents, which can make a great relaxing day at the beach, become a scary or even deadly experience. Therefore although it is not stated in the New Jersey Science Standards, we feel it is a great opportunity to educate young students about beach safety at school, so they can bring that information home and share with their families. It also empowers the students to make good decisions to avoid potentially dangerous situations.

## Key Concept

Students learn about beach safety and how to make safe decisions while at the beach.



Shorething Young People

Shorething Adults and Teachers

Shorething Volunteers

Shorething > Young people > Games > Beach risk game

Home

How safe are you?

Games

- ▶ Lifeguard line-up
- ▶ Rescue response
- ▶ Scatty rescue
- ▶ Train a life guard
- ▶ Build a lifeboat
- ▶ Boating games
- ▶ Decision making quiz
- ▶ Beach risk game

Craft area

Crew interviews

Virtual lifeboat tour

Join Stormforce

Crew member profile

Lifeguard profile

Grace Darling

All about money

Blue Peter

Ask us forum

Cool downloads

Video corner

RNLI main site

# BEACH RISK GAME

Discover the four SAFE rules with our free fun safety game!

This **free safety game** helps you to understand and be aware of the four SAFE rules at the beach.

Each letter of SAFE stands for the following:

S is for Spot the dangers

A is for Always go with a friend or with an adult

F is for Find and follow the safety sings and flags

E is for Emergency – put your hand up and shout!



Play Game

ADD THIS

NEWS →

Lifeboat Volunteers of the Future Visit RNLI New Brighton

All Souls' super cake bake raises funds for the RNLI

Ifracombe RNLI to benefit from puppet power

NEWS ARCHIVE


EVENTS →

EVENTS ARCHIVE

Swim between the red and yellow flags




**Decision making quiz**



Play our online decision making quiz and see the consequences of the choices we make.

Play game    Read more

**Boating safety game**



Play our **interactive boating game**, highlighting key items to take on a boating trip and how to keep safe at sea.

Play game    Read more



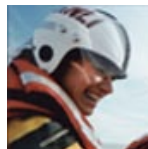
Grace Darling



Downloads



SAFE



About RNLI



Link to us





Shorething Young People

Shorething Adults and Teachers

Shorething Volunteers

Shorething > Young people > Games > Decision quiz

Home

How safe are you?

Games

- ▶ Lifeguard line-up
- ▶ Rescue response
- ▶ Scatty rescue
- ▶ Train a life guard
- ▶ Build a lifeboat
- ▶ Boating games
- ▶ Decision making quiz
- ▶ Beach risk game

Craft area

Crew interviews

Virtual lifeboat tour

Join Stormforce

Crew member profile

Lifeguard profile

Grace Darling

All about money

Blue Peter

Ask us forum

Cool downloads

Video corner

RNLI main site

# DECISION MAKING QUIZ

Play our online safety quiz and see the consequences of your choices!

A visit to the beach can be good fun but sometimes things don't always go as planned.


Decide what to do when something does go wrong at the beach and then see the consequence of each choice.

- In this activity you can find out what happens when something does go wrong.
- There are three different situations to choose from.
- Decide what to do and then find out the consequence of each choice.



Start Quiz


**Beach risk safety game**



Play our **fun safety game** and you will understand and be aware of the four SAFE rules at the beach.

[Play game](#) [Read more](#)

**Train a lifeguard game**



Play our **lifeguard game now** and see what you need to do to become a Lifeguard.

[Play game](#) [Read more](#)

ADD THIS

NEWS →

**Lifeboat Volunteers of the Future Visit RNLI New Brighton**

**All Souls' super cake bake raises funds for the RNLI**

**Ifracombe RNLI to benefit from puppet power**

NEWSARCHIVE

EVENTS →

EVENTSARCHIVE

If you see someone else in trouble, tell a lifeguard or call 999/112 and ask for the Coastguard



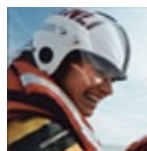
Grace Darling



Downloads



SAFE



About RNLI



Link to us





# SOS Fact Sheet

# RIP CURRENTS

## What are Rip Currents?

Rips are strong, narrow currents that flow from the shoreline seaward past the breaking waves. They exist as a way of getting water carried to the beach by breaking waves back out to sea and are usually confined to deeper channels between shallow sand bars. The bigger the waves, the stronger the rip. Think of them as "rivers of the sea".

## Types of Rips

- Low energy rips are the most common and occur when waves are smaller or haven't changed in a while. They are usually fixed in place and sit in channels between sand bars and don't move much.
- High energy or flash rips are bigger and occur when waves have increased suddenly, or during a storm. They tend to move around a bit and flow faster.
- Headland and fixed rips are often permanent and occur next to headlands and structures such as groynes and jetties.



**Low Energy Rip**



**High Energy Rip**

## Are Rips Dangerous?

Rips are only dangerous if you don't understand what they are and you are not a good swimmer. They can carry you more than 100 m offshore in less than a minute and are the major cause of surf drownings and rescues in Australia. However, surfers use rips to their advantage to help them swim out through the surf quickly.



# SOS Fact Sheet

# RIP CURRENTS

continued

## Spotting a Rip

Since rips often sit in deeper channels between shallow sand bars, always spend 5-10 minutes looking at the surf zone for consistent darker and "calmer" areas of water that extend offshore between the breaking waves. Rips flow against the direction of the incoming waves so there's often a weird, disturbed surface compared to the rest of the surf. Rips also move things so look for moving sand, seaweed, foam and people!



Dark areas indicate the rip

## How do you get out of a rip?

- The most important thing is DON'T PANIC! The rip won't pull you under the water and drown you, it will just carry you seaward.
- Do not swim against the rip or else you will tire quickly. Either swim to the side, or let it take you out to the back of the surf and signal for help.
- Don't get caught in one in the first place! Make sure you understand what rips are and ALWAYS swim between the flags on patrolled beaches.

## Fast Facts about Rips

- Rips flow fastest around low tide
- Rip speed increases rapidly (pulses) shortly after wave sets break
- Typical rips flow faster than Olympic swimmers!
- On long beaches in NSW and QLD, rips occur approximately every 200 m

Science of the Surf  
www.scienceofthesurf.com  
Dr Rob Brander [rbrander@unsw.edu.au](mailto:rbrander@unsw.edu.au)  
0401 420 962



# Rip Currents

**CAUTION**  
*if possible*  
**SWIM NEAR A  
LIFEGUARD**

What They Are • The Dangers • How to Escape



## What is a rip current?

Rip currents are channeled currents of water flowing away from shore at surf beaches. They typically extend from near the shoreline, through the surf zone and past the line of breaking waves. (The surf zone is the area between the high tide level on the beach to the seaward side of breaking waves.)



## How do rip currents form?

Rip currents form when waves break near the shoreline, piling up water between the breaking waves and the beach. One of the ways this water returns to sea is to form a rip current, a narrow stream of water moving swiftly away from shore, often perpendicular to the shoreline.



## How big are rip currents?

Rip currents can be as narrow as 10 or 20 feet in width though they may be up to ten times wider. The length of the rip current also varies. Rip currents begin to slow down as they move offshore, beyond the breaking waves, but sometimes extend for hundreds of feet beyond the surf zone.



## How fast are rip currents?

Rip current speeds can vary. Sometimes they are too slow to be considered dangerous. However, under certain wave, tide, and beach shape conditions the speeds can quickly become dangerous. Rip currents have been measured to exceed 5 mph, slower than you can run but faster than you or even an Olympic swimmer can swim.



## Are all rip currents dangerous?

Rip currents are present on many beaches every day of the year, but they are usually too slow to be dangerous to beachgoers. However, under certain wave, tide, and beach shape conditions they can increase to dangerous speeds. The strength and speed of a rip current will likely increase as wave height and wave period increase.



## Are rip currents and undertows different?

Rip currents are not “undertow” or “riptides.” These are obsolete terms. In some areas, people have used the term undertow to describe the combination of being knocked down, pulled out, and submerged due to a lack of swimming ability and/or lack of knowing what to do to escape. This is where the myth formed that a rip current (or “undertow”) pulls you under water. A rip current pulls you out, not under.



## Why do some people use terms like runouts and rip tides when you are calling them rip currents?

These terms, though once commonly used in certain regions or time periods, are now considered to be incorrect. The National Weather Service, Sea Grant, and the USLA are working together to use consistent terminology to provide a clear rip current safety message to the public.



## Where should I look for rip currents?

Rip currents can be found on many surf beaches every day. Rip currents most typically form at low spots or breaks in sandbars, and also near structures such as groins, jetties and piers. Rip currents can occur at any beach with breaking waves, including the Great Lakes.



## How do rip currents result in the drowning of swimmers?

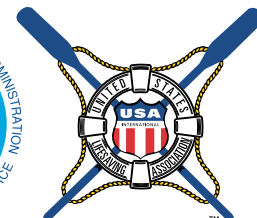
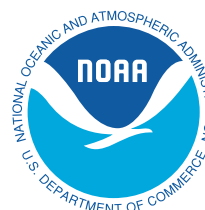
Drowning deaths occur when people pulled offshore are unable to keep themselves afloat and swim to shore. This may be due to any combination of fear, panic, exhaustion, or lack of swimming skills. Rip currents are the greatest surf zone hazard to all beachgoers. They can sweep even the strongest swimmer out to sea. Rip currents are particularly dangerous for weak and non-swimmers.

More information about rip currents can be found at the following sites:

<http://www.ripcurrents.noaa.gov>

<http://www.usla.org/ripcurrents>

<http://www.weather.gov/nwr/>



# Rip Currents



What They Are • The Dangers • How to Escape

**Before you leave for the beach, NOAA encourages you to check the latest National Weather Service forecast for local beach conditions. Many offices issue a Surf Zone Forecast.**

## Q How can I identify a rip current?

Signs that a rip current is present are very subtle and difficult for the average beachgoer to identify. Look for differences in the water color, water motion, incoming wave shape or breaking point compared to adjacent conditions. Look for any of these clues:

- Channel of churning, choppy water
- Area having a notable difference in water color
- Line of foam, seaweed, or debris moving steadily seaward
- Break in the incoming wave pattern
- One, all or none the clues may be visible.

## Q How can people avoid rip current problems?

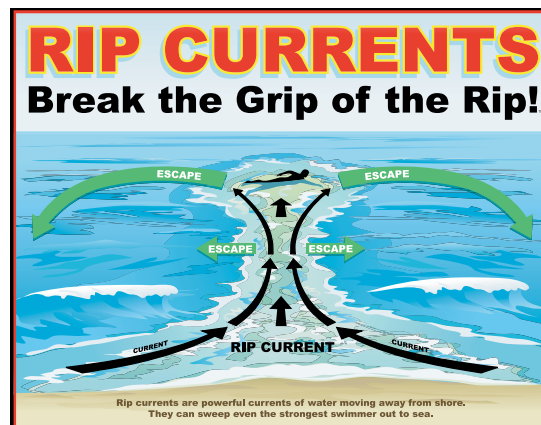
Avoid rip current problem by:

- Learn to swim
- If you'll be in surf, learn to swim in surf. It's not the same as a pool or lake.
- Never swim alone.
- Swim near a lifeguard.
- Look for posted signs and warning flags, which may indicate higher than usual hazards.
- Check with lifeguards before swimming.
- Obey all instructions provided by lifeguards.
- Be cautious. Always assume rip currents are present even if you don't see them.
- If in doubt, don't go out!

## Q What can people do if caught in a rip current?

If caught in a rip current:

- Try to remain calm to conserve energy.
- Don't fight the current.
- Think of it like a treadmill you can't turn off. You want to step to the side of it.
- Swim across the current in a direction following the shoreline.
- When out of the current, swim and angle away from the current and towards shore.



- If you can't escape this, try to float, or calmly tread water. Rip current strength eventually subsides offshore. When it does, swim toward shore.
- If at any time you feel you will be unable to reach shore, draw attention to yourself: face the shore, wave your arms, and yell for help.

## Q How can people assist others who are caught in a rip current?

You can help someone caught in a rip current by:

- If you see someone in trouble, get help from a lifeguard.
- If no lifeguard is available, have someone call 9-1-1.
- Throw the rip current victim something that floats – a lifejacket, a cooler, a ball.
- Yell instructions on how to escape.
- Many have died trying to help others. Don't become a victim while trying to help someone else!
- Before you leave for the beach, check the latest National Weather Service forecast for local beach conditions. Many offices issue a Surf Zone Forecast.
- When you arrive at the beach, ask on-duty lifeguards about rip currents and any other hazards that may be present.

**More information about rip currents can be found at the following sites:**

<http://www.ripcurrents.noaa.gov>    <http://www.usla.org/ripcurrents>

<http://www.weather.gov/nwr/>

