

The image is a slide from a presentation. At the top, there is a header with the text "II-MEF-SAFETY-DEPARTMENT" in a stylized green font with a yellow outline, flanked by the II MEF logo on the left and a green cross with the word "SAFETY" on the right. Below the header is the title "Introduction" in bold black text. Underneath the title is a list of three bullet points, each starting with a red square icon. The first bullet point is in red text and discusses the 2007 summer beach season and the loss of two Marines. The second and third bullet points are in black text and describe the hazards of rip currents.

**Introduction**

- ❑ Although the 2007 summer beach season has not even started, II MEF has lost two Marines due to drowning caused by rip currents. In light of this and the fact that Memorial Day Weekend is rapidly approaching, we must educate our Marines on recognition, avoidance, escaping, attempted rescues and the associated dangers of rip currents.
- ❑ Rip currents are a major hazard to all beachgoers and are particularly dangerous for the weak or non-swimmers, but they can sweep even the strongest swimmer out to sea.
- ❑ Drowning deaths occur when people are pulled offshore and are unable to keep themselves afloat or swim to shore.
- ❑ Rip currents are terrifying because they catch you off guard: One minute you're bobbing along peacefully in the surf, the next you're being dragged out to sea at top speed. They occur in all sorts of weather and on a wide range of beaches. Unlike violent, crashing waves, you probably won't notice a rip current until you're caught in one.



## Facts

- Rip currents are the Number One concern for beach lifeguards.
- Rip currents are responsible for about 150 deaths every year in the United States.
- Each year America's lifeguards rescue over 60,000 people from drowning.
  - Of these, over 80% are rescues of people caught in rip currents.
- In the absence of timely rescue, it is believed that over 80% of the drowning fatalities at beaches are caused by rip currents.
- Despite these startling statistics, many swimmers don't know anything about rip currents and have no idea how to survive when caught in one. In this brief, you will find out what causes rip currents, how to recognize them and what to do if caught in one.



## What is a rip current?

- A rip current is a narrow, powerful current of water running perpendicular to the beach. It is caused by water accumulated on shore from waves that create a "seaward pressure". This pressure is released in an area with the least amount of resistance and runs out into the ocean.
- Rip currents 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.)
- Rip currents may be 200 to 2,500 feet in length but are typically less than 30 feet wide.
- 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.
- Rip currents can move quickly, often 5 miles per hour or faster.
- Rip currents also exist in areas where the strength of the waves are weakened by objects such as rock jetties, piers, natural reefs, and even large groups of bathers.
- Rip currents often look like muddy rivers flowing away from shore.

**What a rip current is not!**

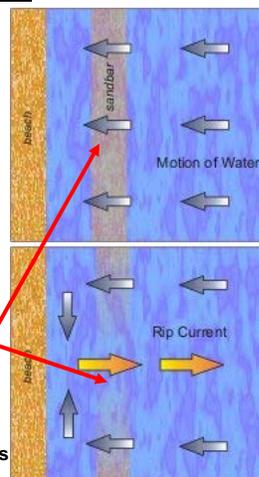
- ❑ It is **NOT** a “**RIPTIDE**” - This is a misnomer. Tides are the rising and falling of water levels in the ocean. They are primarily caused by the moon’s gravitational pull and they change gradually and predictably every day. Rip currents are caused by the shape of the shoreline and may be sudden and unexpected.
- ❑ It is **NOT** an “**UNDERTOW**” - Rip currents are sometimes referred to as "undertow" but this is inaccurate. Undertow describes a current of water that pulls down to the ocean floor. Rip currents move along the surface of the water pulling you out to sea, not underneath the water's surface. If a rip current knocks you off your feet in shallow water you may end up being pulled along the ocean bottom, if this happens relax your body and the current should keep you near the surface.

**When do Rip Currents usually form?**

- ❑ Rip currents can be found everyday.
- ❑ Under most tide and sea conditions the speeds are relatively slow.
- ❑ Under certain wave, tide, and beach profile conditions the speeds can quickly increase to become dangerous to anyone entering the surf.
- ❑ The strength and speed of a rip current will likely increase as wave height and wave period increase and are most dangerous during high surf conditions.

**Where do Rip Currents usually form?**

- ❑ 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 be very narrow or extend hundreds of yards wide.
- ❑ The seaward pull of rip currents varies:
  - Sometimes rip currents end just beyond the line of breaking waves
  - Sometimes rip currents continue to push hundreds of yards offshore



### How to Identify Rip Currents

☐ Look for these clues:

- A channel of churning, choppy water
- An area having a notable difference in water color
- A line of foam, seaweed, or debris moving steadily seaward
- A break in the incoming wave pattern

### Note

One or more of the above clues may indicate the presence of rip currents but they are often not readily or easily identifiable to the average beachgoer. Polarized sunglasses make it easier to see the rip current clues provided above.

### What does a rip current look like?





**What do I do if I see someone caught in a rip current?**

- 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 boogie board



- A cooler



- A ball.



- Yell instructions on how to escape.

**!!!! Many have drowned trying to help others. Don't become a victim while trying to help someone else!!!!**

**What do I do if I decide to attempt to rescue someone caught in a rip current?**

**Remember this warning from the last slide:**

**!!!! Many have drowned trying to help others. Don't become a victim while trying to help someone else!!!!**

- But we are Marines and as Marines we most likely will not sit there and watch someone in trouble without rendering assistance.



- Therefore think smart before you attempt to enter the rip current to save someone.

- Tell someone to get a lifeguard



- Tell someone to call 911

- Then, if you must enter the water, DO NOT enter without something that floats!!!!**

- A Life Jacket



- A Boogie Board



- A Raft



- A Surf Board



- Do not abandon the above to effect the rescue. Stay on your Flotation gear!!!!!!!!!!!!**

- Once you have the victim either on board with you or holding on to the flotation device, exit the rip current per the previous guidance



### Once again lets look at the Rip Current safety tips

- Whenever possible, swim at a lifeguard-protected beach.
- Never swim alone.
- Learn how to swim in the surf, it's not the same as swimming in a pool or lake.
- Be cautious at all times, especially when swimming at unguarded beaches.
- If in doubt, don't go out.
- Obey all instructions and orders from lifeguards.
- Ask a lifeguard about the conditions before entering the water.
- Stay at least 100 feet away from piers and jetties, permanent rip currents often exist near these structures.
- Consider using polarized sunglasses when at the beach, they will help to identify signatures of rip currents by cutting down glare and reflected sunlight off the ocean's surface.
- Pay especially close attention to children and the elderly when at the beach - even in shallow water the wave action can cause loss of footing.



### Conclusion

Each year numerous Marines die due to swimming related mishaps. The 2007 summer beach season has not even started and two fellow Warriors have drown because of Rip Currents. Everyone going to the beach needs to be educated about the dangers of rip currents -- we cannot afford to lose another Marine, Sailor or family member to this type of tragedy.