



## Frequently Asked Questions About Sharks

### What Causes Sharks to Attacks Humans?

Sharks do not normally hunt humans. When they do attack a human, it is usually a case of mistaken identity. Shark sometimes mistake humans for its natural prey, such as fish or a marine mammal or sea turtle, and most often will release the person after the first bite. The majority of shark bites are “hit-and-run” attacks by smaller species, such as blacktip and spinner sharks. They mistake thrashing arms or dangling feet as prey, dart in, bite, and let go when they realize it’s not a fish. The “big three” species -- bull, tiger, and great white sharks --are big enough to do a lot of damage to a human and must be treated with respect and caution.



### Is There an Increase in the Number of Sharks and Attacks?

In 2005, there were 39 recorded unprovoked shark attacks in the U.S., versus 52 in 2000. According to the International Shark Attack File, the numbers of shark bites from year-to-year seem to be directly associated with the number of humans swimming, diving and surfing in the ocean. Some shark populations have been on the decline since the mid-1980s, when the commercial fishery for sharks became a booming industry. Current regulations are working to reverse the trend of declining shark populations in the U.S., although some species are still depleted, and to maintain the shark populations that are healthy.

### What is NOAA Fisheries’ Role With Sharks?

The National Marine Fisheries Service (NOAA Fisheries) manages the commercial and recreational shark fisheries in the Atlantic Ocean, including the Caribbean Sea and the Gulf of Mexico. In the Pacific Ocean, NOAA Fisheries works with regional fishery management councils and is developing shark management measures. The agency is mandated by Congress under the Magnuson-Stevens Fishery Conservation and Management Act to conduct stock assessments, monitor the species abundance of sharks, and implement fishery regulations that maximize the benefits of sharks as a resource for humans while also ensuring that we do not deplete shark populations. The United States began regulating shark fisheries in 1993. A Fishery Management Plan that included sharks, swordfish, and tunas went into effect in 1999, and sharks have been regulated under a catch limit and quota system ever since.

“The number of shark-human interactions occurring in a given year is directly correlated to the amount of time humans spent at sea.”

-- George Burgess  
International Shark Attack File

## **Why Should We Protect Sharks?**

Sharks are awesome creatures whose biology has remained virtually unchanged for millions of years. Just as humans strive to protect other living creatures from becoming threatened or endangered, it is our duty as stewards of the Earth to protect all ocean life, including sharks. As top predators in the sea, sharks provide a valuable balance to the marine ecosystem. People are one of only a few species that prey on sharks (killer whales and other sharks are others), killing over a hundred million per year. We must support and abide by fishing regulations that were put into place to ensure that sharks will thrive in the ocean for millions of years to come.

## **How Common Are Shark Attacks? How Do I Minimize the Risk of Being Bitten by a Shark?**

More people are killed each year by electrocution by Christmas tree lights than by shark attacks. Think about the things you would do to minimize your family's risk of being harmed by Christmas tree lights. You'd unplug the lights at night and never leave them unattended. You'd keep your tree moist to prevent a fire. Maybe you'd educate your children about the potential of electric shock if they improperly plugged in the lights. Similarly, you can take precautions that minimize your risk of encountering a shark when visiting the beach this summer:

- Always stay in groups since sharks are more likely to attack an individual. Do not wander too far from shore --- this isolates you and decreases your chance of being rescued.
- Avoid being in the water early in the morning and during darkness or twilight hours when sharks are most active and searching for food.
- Do not enter the water if bleeding.
- Avoid wearing shiny jewelry because the reflected light resembles the sheen of fish scales.
- Avoid waters being used by sport or commercial fisherman, especially if there are signs of bait fishes or feeding activity. Diving seabirds are good indicators of such action.
- Use extra caution when waters are murky and avoid bright colored clothing --- sharks see contrast particularly well. Refrain from excess splashing.
- Exercise caution when occupying the area between sandbars or near steep dropoffs --- these are favorite hangouts for sharks.
- Do not enter the water if sharks are known to be present and evacuate the water if sharks are seen while there. And do not approach a shark if you see one.
- Between the months of 5-9 (May – September), restrict your ocean swimming from 9-5.