



Exhibit message

Although sharks (particularly great white sharks) are greatly feared by humans, the number of humans attacked and killed by sharks is very small. The risk of being killed by other accidental means (such as lightning strike) is greater than the risk of being killed by a great white shark.

Quick fact

While it is difficult to collect highly accurate data, 5 to 15 people worldwide die each year as a result of 70 to 100 reported shark attacks per year.

Graphic panel text

Should humans fear sharks or vice versa?

Sharks have few predators. Their greatest threat comes from humans, who kill 50 to 70 million sharks every year.

Sharks kill very few humans. This map shows the number of humans attacked and killed by great white sharks between 1876–2002. Over this 127 year period, 69 people worldwide (including 32 Australians) were killed by great white sharks.

In 1999 alone, 1552 Australians and 41 611 Americans were killed in road traffic accidents.

Compare the number of shark deaths with these Australian death statistics between 1979–2002 (24 years):

- 11 people were killed by dog attacks
- 12 people were killed by lightning
- 52 people were killed by bee, hornet or wasp stings.

Want to know more about great white shark attacks on humans?

The top three species of shark responsible for human deaths are:

1. great white sharks (*Carcharodon carcharias*)
2. tiger sharks (*Galeocerdo cuvier*) and
3. bull sharks (*Carcharhinus leucas*).

Great white sharks enemies are mostly killer whales, other great white sharks and *Homo sapien sapiens* or modern human beings. Humans kill sharks for commerce and out of fear.

The reason why sharks attack humans is greatly debated amongst shark researchers. Various theories include:

1. humans on surfboards and kayaks resembling the silhouette of seals to sharks looking upwards (attacks due to 'mistaken identity')
2. sharks using taste as an exploratory tool (biting and spitting out man-made objects and less fatty animals that are not to their taste)
3. sharks attacking intruders in their territory (aggressive or territorial motives) or
4. sharks viewing humans as a source of food (although most humans who are attacked are left alone and are very rarely consumed).

Sharks hunt and eat fatty prey such as seals, sea lions, dolphins, elephant seals and marine turtles. When sharks attack and bite less fatty, more muscular animals such as marine birds, sea otters and humans, the shark tends to spit them out rather than eat them. Sharks have even been observed feeding on the blubber of baleen whales, leaving the whale's muscle untouched.

Extra for experts

Sharks attack humans in different ways, usually depending on the water depth and visibility.

'Hit and run' attacks are the most common type of shark attack and they occur on surfers and swimmers close to the shore. The shark bumps or bites the lower body of a person and swims away without returning. This type of attack is thought to be 'mistaken identity' in the murky shallows and humans are usually injured rather than killed.

'Bump and bite' attacks occur on divers and deep water swimmers. The shark circles the person and bumps the person once or twice with their nose. Then the shark returns to bite the person once or more, leaving severe wounds that usually kill the person.

'Sneak' attacks on divers and deep water swimmers are the most violent. The shark strikes the person without warning and with great force. These attacks usually kill people, and are believed to be motivated by feeding instincts or protection of their territory.



For advice on ways you can further reduce the extremely small risk of being attacked by a shark, go to The International Shark Attack File:

<http://www.flmnh.ufl.edu/fish/Sharks/Attacks/relariskreduce.htm>

Further information

Special thanks to:

- George H. Burgess
(International Shark Attack File)
- Professor Timothy Tricas
<http://www.hawaii.edu/fishlab/>
- A. Peter Klimley
<http://wfc.ucdavis.edu/> and
- Richard Martin
<http://www.elasmo-research.org/index.html>

for their advice on shark hunting behaviour.

The International Shark Attack File (ISAF)

The ISAF was the main source of information for this exhibit. If you are comparing information on this site to the Australian Shark Attack File site, please consider the different periods of time and species of shark covered by each organisation.

<http://www.flmnh.ufl.edu/fish/Sharks/ISAF/ISAF.htm>

Australian Shark Attack File

<http://www.zoo.nsw.gov.au/content/view.asp?id=234>

White shark attack shows they're not man-eaters

http://www.eurekalert.org/pub_releases/2003-08/uoc--wsa_1082803.php

Australian Institute of Marine Science

<http://www.aims.gov.au/pages/research/project-net/dma/pages/sharks-02.html>

Australian Bureau of Statistics. Year Book Australia 2002. Road traffic accidents involving fatalities and casualties.

<http://www.abs.gov.au/ausstats/abs@.nsf/0/149C8432D979D4EBCA256B360006203A?Open&Highlight=0,Traffic>

The Australian Institute of Health and Welfare

<http://www.aihw.gov.au/>