

How to Treat Jellyfish Stings

The Do's and Don'ts to soothing your skin from an aquatic animal sting

Jellyfish belong to the phylum Cnidarians, which contains over 10,000 species of aquatic and mostly marine animals that have specialized cells used for capturing prey and for defense against predators. When this specialized structure is activated, a tiny harpoon-like tubule shaft known as a penetrant nematocyst forcefully ejects and penetrates your skin and releases its toxins. This nematocyst is responsible for the stings delivered by jellyfish, the Portuguese man o' war, tentacle based corals, the hydra, and fire corals. Did you know that fire corals are not technically corals? In fact, they are closely related to jellyfish and other stinging animals. Their nematocysts protrude from numerous surface pores, and they also have a sharp, calcified external skeleton that can scrape the skin.

In most cases jellyfish stings are nonlife threatening and can be treated with the removal and deactivation steps below; however, in some extreme cases jellies have been known to kill people. This is why it is helpful to know your jellies when out in the water. Be prepared to seek medical attention if your symptoms worsen, and note that some cases may require the use of antivenom.

After coming into contact with a jellyfish not all nematocysts will release venom right away, which is why it is important to remove the tentacle as soon as possible. Contrary to the old wives tale, never urinate on a jellyfish sting. Not only will this not work, it will actually make the problem worse. Add rinsing with fresh water and/or applying ice to your **DO NOT** list as this too, worsens the irritation and causes the tentacles to fire due to the change in tonicity, the measurement of osmotic pressure. In some cases these stings can be extremely dangerous depending on the type of jelly, where you were stung, your age, and your health. Children and the elderly are more susceptible to extreme reactions to jellyfish stings.

Beware of Seabather's eruption! Have you ever emerged from the salt waters of the tropics only to find your skin covered in small blisters and/or elevated areas of the skin that are intensely itchy? This is called seabather's eruption. Most divers and swimmers call this "sea lice"; however, that is incorrect, as sea lice are fish parasites that do not affect humans. Actually, jellyfish larvae cause seabather's eruption with the primary offender being the thimble jellyfish. Initial swimmer exposure to the free-floating larvae produces no effects, as each organism possesses only a single undeveloped nematocyst that is inactive while suspended in seawater. However, due to their microscopic size and sticky bodies, large concentrations of larvae can become trapped in minute gaps between skin and clothing or hair. Once the swimmer leaves the ocean, the organisms stuck against the skin die and automatically discharge their nematocysts when crushed, dried out, or exposed to fresh water. This is why symptoms usually do not appear until the swimmer dries themselves in the sun or takes a freshwater shower without first removing the affected clothing. We suggest treating seabather's eruption as you would a regular jellyfish sting with the addition of promptly removing your swim clothing while it is still wet. Now rinse yourself off with seawater to negate the risk of the nematocysts firing. If irritation occurs, apply Sting Cooler gel or spray to soothe the affected area.

Based on our research, we have found that Reef Safe by Tropical Seas® Jellyfish Sting Cooler system is effective and affordable. It utilizes lidocaine hydrochloride, and a credit card sized tentacle scraper to help deactivate the nematocysts (stingers) in your skin from releasing more venom. Appropriate steps include:

Step 1: Rinse affected area generously with seawater to remove any remaining pieces of tentacle and/or jelly like substance*

**When removing tentacles, we would suggest wearing some type of glove to prevent accidental contact.*

Step 2: Generously spray Reef Safe Sting Cooler Spray to the affected area

Step 3: Immediately scrape the affected area with the Reef Safe Sting Cooler Scraper*

**There is some debate whether to immediately scrape the area or to wait. Through our research we have determined that you should remove the venomous stingers that are embedded in your skin immediately after spraying with the Reef Safe Sting Cooler spray to stop the nematocysts (stingers) in your skin from releasing more venom into your system.*

Step 4: Rinse the affected area with seawater and gently blot dry*

**DO NOT vigorously rub the area.*

Step 5: Generously apply Reef Safe Sting Cooler Gel to affected area

After use: Rinse Reef Safe scraper card to ensure nothing is attached.