

Local South Carolina Jellyfish

Jellyfish

Although most jellyfish that inhabit South Carolina waters are harmless to humans, there are a few, like the sea wasp, that require caution. Learning how to identify the different species can help you decide which ones can be safely ignored.



Cannonball Jelly

(Stomolophus meleagris)

Also known as jellyballs, these jellyfish are the most common in our area. During the summer and fall, large numbers of Stomolophus appear near the coast and in the months of estuaries. They are considered to be pests by commercial trawl fishermen because they clog and damage nets and slow sorting and trawl times.

Fortunately, while the cannonball is the most abundant jellyfish in the area, it is also one of the least venomous. Cannonballs can be identified by their hemispherical white bells decorated with rich, chocolate brown bands. They have no tentacles but a gristle-like feeding apparatus formed by the joining of the oral arms. Cannonballs rarely grow larger than 8 inches in diameter.



Mushroom Jelly

(Rhopilema verrilli)

The mushroom jelly is often mistaken for the cannonball jelly, but it differs in many ways. The larger mushroom jelly, growing to 20 inches in diameter, lacks the brown bands associated with the cannonball and is much flatter and softer. Like the cannonball, the mushroom has no tentacles, however, it possesses long finger-like appendages hanging from the feeding apparatus. The mushroom jelly does not represent a hazard to humans.



Moon Jelly

(Aurelia aurita)

Probably the most widely recognized jellyfish, the moon jelly is relatively infrequent in South Carolina waters. It has a transparent, saucer-shaped bell and is easily identified by the four pink horseshoe-shaped gonads visible through the bell. It typically reaches 6-8 inches in

diameter, but some are known to exceed 20 inches. The moon jelly is only slightly venomous. Contact can produce symptoms from immediate prickly sensations to mild burning. Pain is usually restricted to immediate area of contact.



Lion's Mane

(Cyanea capillata)

Also known as the winter jelly, the lion's mane typically appears during colder months of the year. The bell, measuring 6-8 inches, is saucer-shaped with reddish brown oral arms and eight clusters of tentacles hanging underneath. Cyanea are generally considered moderate stingers. Symptoms are similar to those of the moon jelly, however, usually more intense. Pain is relatively mild and often described as burning rather than stinging.



Sea Nettle

(Chrysaora quinquecirrha)

The sea nettle is frequently observed in South Carolina waters during summer months. This jellyfish is saucer-shaped with brown or red pigments, usually 6-8 inches in diameter. Four oral arms and long marginal tentacles hang from the bell. Considered moderate to severe, symptoms from sea nettle stings are similar to those of the lion's mane.



Sea Wasp

(*Chiropsalmus quadrumanus*)

Known as the box jelly because of its cube-shaped bell, the sea wasp is the most venomous jellyfish inhabiting our waters. Their potent sting can cause severe dermatitis and may even require hospitalization. Sea wasps are strong, graceful swimmers reaching 5-6 inches in diameter and 4-6 inches in height. Several long tentacles hang from the

four corners of the cube. A similar species, the four-tentacled Tamoya haplonema, also occurs in our waters.

Treatment of Dermatitis Caused By Jellyfish Stings

First Aid

1. Immediately rinse the wound with seawater, not with freshwater. Do not rub the wound with a towel or with clothing to remove adherent tentacles. Using freshwater or rubbing the wound will fire any stinging cells that have not already fired. Remove any obvious tentacles with tweezers or a well-gloved hand.
2. Vinegar is the treatment of choice to inactivate the jellyfish toxin. Vinegar does not alleviate the pain from a sting, but it stops unfired stinging cells from firing. It may not be extremely effective against *Chrysaora* or *Cyanea*. The detoxicant should be applied continuously for at least 30 minutes or until the pain is relieved.

If vinegar is immediately available, a liberal dousing should occur and at least 30 seconds should pass before removing the tentacles.

For stings from other species, there are substances that may be more specific and therefore more effective. If the sting occurs north of Coastal North Carolina, a baking soda slurry or unseasoned meat tenderizer (powdered or in solution) should be used in lieu of vinegar. If meat tenderizer is used, it should be applied for no longer than 15 minutes.

Do not use alcohol, as it may cause the stingers to fire

3. Once the wound has been soaked with a decontaminant (e.g., vinegar), remaining (and often essentially invisible) stinging cells must be removed. The easiest way to do this is to apply shaving cream or a paste of baking soda, flour, or talc and to shave the area with a razor or similar tool. If sophisticated facilities are not available, the stinging cells should be removed by making a sand or mud paste with seawater and using this to help scrape the victim's skin with a sharp-edged shell or piece of wood. The rescuer must take care not to become envenomed; bare hands must be rinsed frequently. If a scrub brush or pad has been used to treat the

envenomation, this step may not result in much, if any, clinical improvement.

4. A topical anesthetic ointment (lidocaine, 2.5%) or spray (benzocaine, 14%), antihistaminic cream (diphenhydramine or tripeleennamine), or mild steroid lotion (hydrocortisone, 1%) may be soothing. These are used after the toxin is inactivated. Paradoxical reactions to benzocaine are rarely noted.
5. Victims should receive standard anti-tetanus vaccine.
6. Prophylactic antibiotics are not automatically indicated. Each wound should be checked at 3 and 7 days after injury for infection. Any ulcerating lesion should be cleaned three times a day and covered with a thin layer of nonsensitizing antiseptic ointment, such as mupirocin.

Delayed Reaction

A delayed reaction may be noted in areas of skin contact and may be accompanied by fever, weakness, arthralgias, painful joint swelling, and effusions. This may recur multiple times over the course of 1 to 2 months. The treatment is a 10- to 14-day taper of prednisone, starting with 50 to 100 mg. Prednisone administration may need to be prolonged or repeated with each flare of the reaction.

Persistent Hyperpigmentation

Postinflammatory hyperpigmentation is common after the stings of many jellyfish and other lesser coelenterates. A solution of 1.8% hydroquinone in a glycol and alcohol base (70% ethyl alcohol and propylene glycol mixed at a 3:2 ratio), twice a day as a topical agent for 3 to 5 weeks, has been used successfully to treat hyperpigmentation after a some jellyfish stings.