



Stings by the Sea – A First Aid Guide

Many Maltese families enjoy spending some leisure time at the seaside, particularly during summer. These seaside visits can sometimes expose us to various creatures with stings or bites that can be dangerous to humans. This first aid guide aims to provide simple information about some of the commonest culprits; jellyfish, bees and wasps. It also provides some information about a new potential culprit; the lionfish. Lionfish have only recently been sighted for the first time in Maltese waters but have the potential to cause severe injury and it is therefore important for the general public to become more aware of their potential presence.

Jellyfish

The ideal first aid treatment for a jelly fish sting depends on the type of jellyfish that inflicted it. Certain **common principles** do apply, namely:

- Never apply fresh water, alcohol or compression bandages to jellyfish stings
- Seek medical help immediately if the person stung has breathing difficulties or is in shock.
- If pain persists after first aid measures or there are any complications, consult your pharmacist or doctor as the affected area may benefit from painkillers, steroid preparations or antihistamines.

First aid measures according to jellyfish species:

Mauve stinger (*Pelagia noctiluca*)



- Wash the stung area carefully with seawater. Do not rub.
- Apply a baking soda slurry (a mixture of 50% commercial baking soda and 50% seawater) for five minutes if available, to prevent further stings from attached tentacles.
 - Use a plastic card to scrape off any residual tentacles.
 - Apply ice packs (wrapped in a cloth or thin towel, not directly on the skin) for 5-15 minutes. Warn the person stung that this may initially be uncomfortable. If pain is still present after this time, the ice pack may be reapplied.





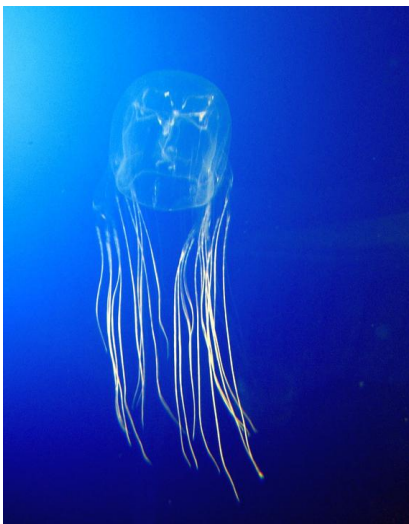
The compass jellyfish (*Chrysaora hysoscella*)



- Wash the stung area carefully with seawater. Do not rub.
- Apply a baking soda slurry (a mixture of 50% commercial baking soda and 50% seawater) for five minutes if available, to prevent further stings from attached tentacles.
 - Use a plastic card to scrape off any residual tentacles.
 - Apply ice packs (wrapped in a cloth or thin towel, not directly on the skin) for 5-15 minutes. Warn the person stung that this may initially be uncomfortable. If pain is still present after this time, the ice pack may be reapplied.



The box jellyfish (*Carybdea marsupialis*)



- Wash the stung area carefully with seawater. Do not rub.
- Wash the affected area with vinegar
- Use a plastic card to scrape off any residual tentacles.
- Apply ice packs (wrapped in a cloth or thin towel, not directly on the skin) for 5-15 minutes. Warn the person stung that this may initially be uncomfortable. If pain is still present after this time, the ice pack may be reapplied.





The cigar jellyfish (*Olindias phosphorica*)



- Wash the stung area carefully with vinegar or with seawater if vinegar is not available. Do not rub.
- Use a plastic card to scrape off any residual tentacles.
- Apply ice packs (wrapped in a cloth or thin towel, not directly on the skin) for 5-15 minutes. Warn the person stung that this may initially be uncomfortable. If pain is still present after this time, the ice pack may be reapplied.



Portuguese man-of-war (*Physalia physalis*)



- Wash the stung area carefully with seawater. Do not rub.
- Use a plastic card to scrape off any residual tentacles.
- Apply hot packs to the affected area or immerse in non-scalding hot water (40-45°C) for 10-20 minutes. If pain is still present after this time, the hot pack may be reapplied.





The Nomadic jellyfish (*Rhopilema nomadica*)



- Wash the stung area carefully with seawater. Do not rub.
- Apply a baking soda slurry (a mixture of 50% commercial baking soda and 50% seawater) for five minutes if available, to prevent further stings from attached tentacles.
 - Use a plastic card or forceps and protective gloves to scrape off any residual tentacles.
 - Apply ice packs (wrapped in a cloth or thin towel, not directly on the skin) for 5-15 minutes. Warn the person stung that this may initially be uncomfortable. If pain is still present after this time, the ice pack may be reapplied.



Bee and wasp stings

Call 112 and ask for an ambulance if the person stung:

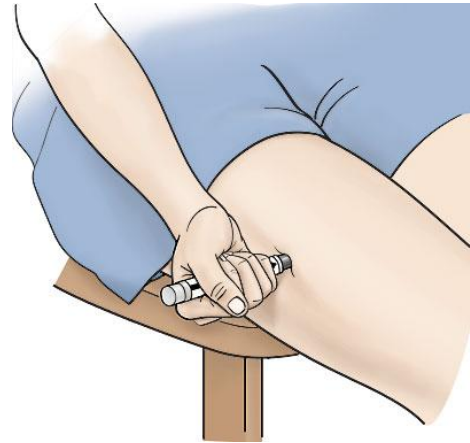
- Has difficulty breathing
- Has a swollen tongue
- Is feeling faint or dizzy
- Has hives (swollen, red, itchy areas of skin)
- Has a history of severe allergic reactions to insect stings

If the person stung has a history of severe allergic reactions to insect stings and carries adrenaline (epinephrine), help them to administer the injection if they are unable to do so themselves. Give the adrenaline as soon as possible even if you are unsure if the symptoms are allergy-related. It will not cause the person harm, but could be life-saving. Here's what you should do:





- If the person has an anaphylaxis/severe allergy action plan from their doctor, follow it.
- Otherwise, read and follow the instructions that come with the adrenaline injection carefully.
- Inject the adrenaline into the outer muscle of the thigh (see image). Avoid injecting into a vein or buttock muscle.
- Never inject adrenaline into hands or feet as this can cause tissue damage. Make sure to inform paramedics/Accident and Emergency department staff if this happens.
- More than one injection may be needed. If there is no improvement in symptoms 5-15 minutes after the first injection, inject another dose of adrenaline if available.
- A person who has received an adrenaline injection for suspected allergy/anaphylaxis should always be taken to the Accident and Emergency Department, even if symptoms appear to have subsided.



If there are no symptoms or history of severe allergy:

- Scrape the area with a plastic card or straight-edged object to remove the stinger. Avoid using pincers or tweezers to remove the stinger as this may release more venom into the stung area.
- Apply ice or a cold pack (wrapped in a cloth or thin towel, not directly on the skin) to the affected area.
- Remove any jewellery such as rings or bracelets from the affected area as it may be difficult to remove them later if swelling occurs.
- If the sting is on an arm or leg, raise the affected limb. This will help to minimize any swelling.
- If the sting is painful, a simple analgesic such as paracetamol may provide relief. Ensure the affected person has no known allergy or contraindication to the drug. Consult your pharmacist or doctor if in doubt, or if the person is experiencing itchiness or any other complications from the sting.
- It usually takes around 2-5 days for the affected area to heal. Make sure to keep the area clean to prevent it getting infected.





Lionfish

Lionfish are slow-moving fish that are generally harmless unless they are handled or threatened. Most lionfish injuries occur in individuals who attempt to reach or grab the fish, most commonly in the context of an aquarium. Lionfish may also launch an attack, spreading out their dorsal fins widely, if they perceive they are cornered. As always, prevention is better than cure. If you encounter a lionfish while swimming, diving or fishing do not approach it unless you have been properly trained to do so. Those who have received such training should make sure they employ proper techniques and equipment to minimize their risk of injury.



If you are stung by a lionfish:

- Those stung while diving should first make a safe ascent, including a safety stop.
- In all cases, the injured area should be inspected for any foreign material then soaked in non-scalding hot water for up to 30 minutes. The hot water will encourage breakdown of the toxins in lionfish venom, which are heat-sensitive. Brief breaks from soaking are encouraged to prevent heat damage to skin and other tissues. When immersion is not possible, the wound should be covered in hot flannels. Cold compresses are discouraged as these will worsen discomfort.
- Tourniquets and bandaging should not be used as these will prevent dispersion of venom from the site of injury, leading to increased pain and tissue damage.
- Simple painkillers can be given if appropriate for the injured person.
- If any of the symptoms do not respond to first aid measures or if any symptoms other than pain and/or swelling are present, medical attention should be sought promptly. Medical intervention may also be required to remove any embedded lionfish spines or spine fragments.



Information on jellyfish stings sourced with kind permission from 'MED-JELLYRISK JELLYFISH ENVENOMATION FIRST AID HANDOUT' by Alan Deidun, Stefano Piraino, Stephanie Purcell.

Further information about lionfish can be found in our publication: 'The Lionfish – A New Threat in Maltese Waters'.

