JELLYFISH STINGS

Jellyfish are of varying types and some in Australian waters are deadly. The common jellyfish are: The ‘Portugese Man of War’ (*Physalia utriculus*) also called the ‘Bluebottle’, the ‘Box Jellyfish’ (*Chironex fleckeri*), and ‘Irukandji’ (*Carukia barnesi*). The Bluebottle and the Box Jellyfish have trailing tentacles that can be several metres long and contain thousands of injecting cells called *nematocysts*. These contain poisons that can cause severe pain and death in cases. Severe allergic reaction can also be produced. The Box Jellyfish and the Irukandji are found in tropical waters.

![Irukandji is about 2.5cm across](image1)  ![‘Box Jellyfish’ is about 30cm across](image2)  ![‘Bluebottle’ is about 10cm across](image3)

The tentacles can be so long that the body of the jelly may not be visible when a person is stung.

![Typical result of jellyfish stinging](image4)  ![and a fatal case](image5)

**Recognition of stings by Bluebottle and other non-tropical jellyfish**
- pain to stung area
- localised ‘wheals’ (sting marks) which are often white with red margins in early stages
- pain in groin or armpits
- headache
- nausea, vomiting
- breathing difficulty may occur after extensive envenomation

Q. What’s a jellyfish?
A. Not a fish. It’s a simple-bodied animal related to sea anemones and corals.
**Management if conscious**

- assist patient from the water
- restrain the patient or other rescuers from rubbing the stung area
- observe airway & breathing regularly and commence Cardio-pulmonary Resuscitation if necessary
- apply hot water about 45°C or as hot as the patient can stand.
- seek medical advice if in doubt i.e. 'National Poisons Information Centre' Ph: 13 11 26.

**Management if unconscious**

- monitor and care for airway and breathing
- avoid touching any adherent tentacles
- treat as per 'If conscious', above
- send for urgent medical assistance

**BOX JELLYFISH STINGS (TROPICAL AREAS)**

- The Box Jellyfish is found in the tropical waters of Australia. Their stings can be fatal as a result of cardiac arrest within minutes. The box jellyfish has caused at least 63 deaths in Australia since 1884. (Irukandji have caused two.)

**Recognition**

It's difficult to determine which species of jellyfish has caused a sting. Also, there can be variation in signs and symptoms.

The sting of the Box Jellyfish and the Irukandji may be recognised by the following:

- immediate pain — usually severe but can be mild or burning pain
- pain may develop in the lymph nodes in groins or armpits
- irrational behaviour
- characteristic 'ladder pattern' on stung area, or
- an inconspicuous mark that may develop a red flare / goose pimples or an orange-peel appearance
- white wheals with surrounding red flare
- multiple whip-like wheals on skin
- later blistering or darkened skin pattern
- generalised muscle aches
- nausea and / or vomiting and headache
- profuse sweating, sometimes only in the sting area
- loss of consciousness
- in major stings (greater than 50% in total area of one limb): cessation of breathing or cardiac arrest (NO response, not breathing normally)
Management of Box Jellyfish sting if patient conscious

Note: if it appears that the patient is suffering cardiac arrest then CPR is the obvious management procedure along with a call for urgent medical aid.

- assist patient from the water
- avoid touching any adherent tentacles
- restrain the patient or other rescuers from rubbing the stung area
- flood stung area with vinegar for 30 seconds to prevent further stinging
- if possible, immerse the stung area in hot water (about 45 °C) for 20 minutes.
- DO NOT leave patient even if conscious
- send for urgent medical assistance and anti-venom
- keep the patient still to lessen absorption of venom.

If unconscious

- monitor and care for airway and breathing as per the Basic Life Support Flow Chart
- avoid touching any adherent tentacles
- Flood the stung area with vinegar for 30 seconds to prevent further stinging
- If clearly stung by a ‘Bluebottle’, do not use vinegar (It doesn’t work.) and treat as per ‘Non Tropical’
- send for urgent medical assistance and anti-venom.

If no vinegar available:
1. Pull off any adherent tentacles with fingers as the skin of the rescuer’s fingers is too thick to permit penetration of stings.
2. Pressure immobilisation is applied only ABOVE the sting. (research suggests that a pressure bandage ON THE STUNG AREA can promote further stinging.)

SIMPLIFIED MANAGEMENT SUMMARY

<table>
<thead>
<tr>
<th>Sting Type</th>
<th>Management Steps</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box jelly</td>
<td>Flood with vinegar to inactivate stingers → Remove tentacles</td>
<td>Apply Hot water 45°C or as hot as the person can stand, to dissipate venom and reduce pain.</td>
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<tr>
<td>Irukjandi</td>
<td>No Vinegar (ineffective) → Remove tentacles</td>
<td>Apply hot water, Give analgesic</td>
</tr>
<tr>
<td>Bluebottle</td>
<td>No Vinegar (ineffective) → Remove tentacles</td>
<td>Apply hot water or topical anaesthetic to reduce pain</td>
</tr>
</tbody>
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