



Marine Stinger Management Newsletter

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The life of the beach.



Preparing for next season

The 2005-2006 season was severe in terms of the quantity of stings in Queensland, with 101 reported Irukandji stings requiring emergency treatment and several severe box jellyfish stings, including one fatality. Now is a good time for organisations concerned with marine stinger management to take stock, and to learn from last season and brainstorm improvements for the next.

We are currently planning a comprehensive schedule of regional information forums, spending a week in each region throughout the tropical and subtropical regions of Queensland where stingers are a problem (i.e., from Agnes Water to the Gulf). Please let us know if you would like myself or other speakers (e.g., medicos, ambulance officers etc) to visit your organisation between September and December. The forums will be structured in such a way as to provide information, answer questions and share ideas for improvements to stinger safety. The overarching goal of these forums will be to communicate ways to pro-actively manage stingers in a safe and balanced way. By mainstreaming stinger safety into a total safety approach, organisations can more easily ensure a stinger-safe environment, making stingers less emotive.

Drop us an email and let us know how we can help you!

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Mark the Date: Calendar

- 15 August 2006: Irukandji Task Force Prevention & Response Working Group meeting: To make a submission, contact Marine Stinger Coordinator 0409 627 869 or lisa.gershwin@jcu.edu.au
- Seminars and Workshops are being planned for all locations and all management sectors; if you or your organisation would like to arrange a specific public or private session, please contact the Marine Stinger Coordinator, Dr. Lisa-ann Gershwin 0409 627 869

Did you know...

The first reported fatality apparently attributable to Irukandji was a 14 year old Filipino boy in 1907.

Following a fairly minor sting, he suffered pain, restlessness, and partial unconsciousness, then improved slightly but died 3 hours later.



Focus on Research

A large number of marine stinger researchers are currently working on effective techniques for prediction, prevention and treatment of marine stings. Each month, we will showcase a particular researcher, research group, or research innovation, in order to keep stakeholders informed of some of the exciting things being done behind the scenes.

Current State of Knowledge on Heat Treatment

Heat treatment of jellyfish stings has recently received much media coverage; as a result, and unfortunately, some people are now confused about which treatment is appropriate to use.

WHAT FIRST AID SHOULD I BE USING?

As of the writing of this article, the issue of heat treatment has not yet been examined by the Australian Resuscitation Council (ARC). Until this panel of experts has considered all available information and issued their recommendations, it is legally and ethically appropriate to follow their current guidelines, available online (www.resus.org.au). To summarise, current ARC endorsed treatments are: for Irukandji or box jellyfish stings, use vinegar to inactivate tentacles or invisible stinging cells; for other types of jellyfish stings, rinse sting site well with seawater (not freshwater!). After stinging cells have been inactivated or rinsed away, use ice or analgesics for pain. See page 5 of this newsletter for the 4-step recommended treatment priorities for tropical jellyfish stings.

HEAT TREATMENT SYNOPSIS

Some recent studies have recommended heat treatment to ease the pain of blue bottle stings and Irukandji stings. A constant temperature of 45°C for 20 minutes has been proposed. However, another recent paper recommended against heat treatment due to lymph problems. This paper also suggested that heat dilates capillaries; the potential implications of enhanced venom uptake have not been examined in depth. Claims that 45°C destroys the venom may also be premature; the few venoms studied denature in the 50-60°C range. Clearly much more research is needed on the question of heat treatment for jellyfish stings – watch this space for updates as they become available.

OTHER CONSIDERATIONS

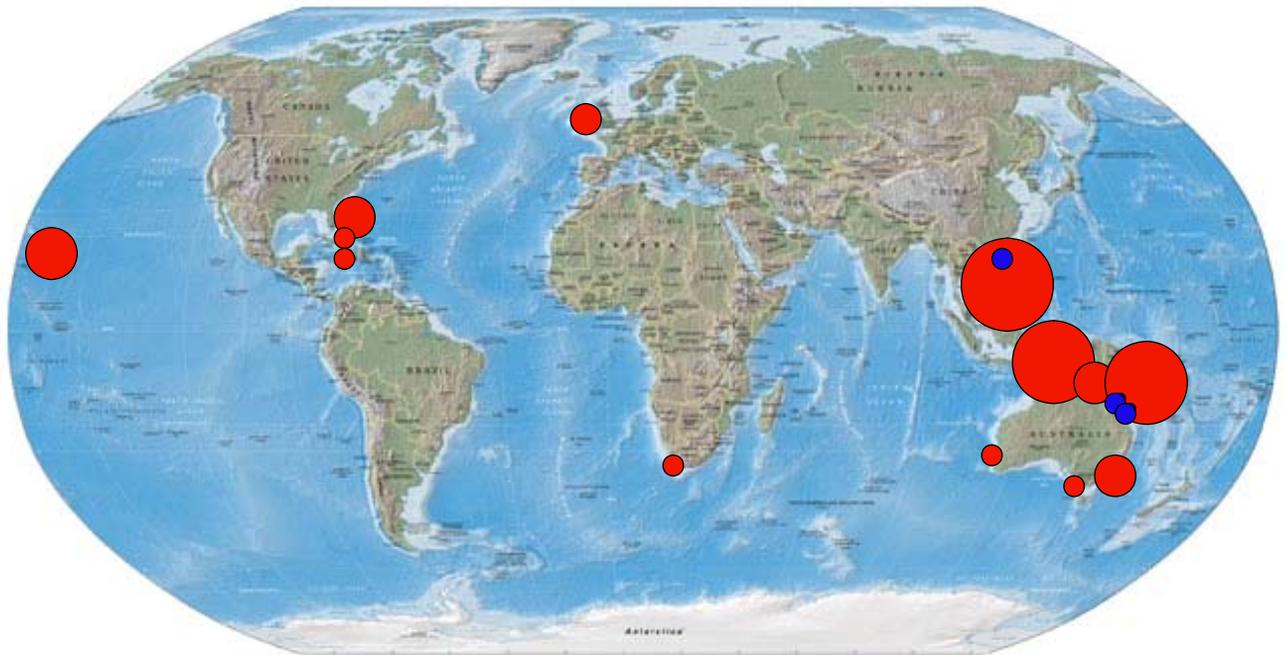
There have also been several cases of people becoming confused about the role of vinegar in treating stings, and using hot water *in place of vinegar*. Fresh water causes stinging cells to discharge through osmotic action. Thus, using any type of fresh water, be it hot or cold, prior to vinegar, may cause additional venom to enter the body – of particular concern in the case of Irukandji or box jellyfish stings. To clarify: for box jellyfish or Irukandji stings, or tropical stings of unknown cause, use vinegar.

Drop us a line and tell us what you'd like to hear more about!



Irukandji in perspective

● Irukandji deaths ● Irukandji stings



Irukandji stings occur globally; Australia leads other nations in pro-active awareness and risk management.

Three people are believed to have died from Irukandji stings over the past 100 years worldwide. While the true number is likely to have been somewhat higher, compare this with other routine and recreational hazards from around the world:

- Over 300 people are killed each year by road accidents in Queensland alone
- Approximately 292 people drown in their cars in the US each year
- Killed by swans worldwide (total) : 2
- Fatal snake bites in Australia per year: 1
- Australian bee sting deaths 1980-1990: 20
- Australian lightning deaths 1980-1990: 19
- Children drowning in UK garden ponds: 8/yr
- Number of people killed at Disneyland (total): 9
- Skiing fatalities per year in USA: 34
- American food allergy deaths: 150-200/year
- Killed by electrical current in USA: 850/yr
- Killed by accidental gunfire in USA: 1452/yr
- Killed by food poisoning in USA: 5000/yr
- Killed by captive elephants since 1983: 17
- 6 in 1000 heart patients dies during sex



What's coming in Future Issues?

In upcoming issues, we will look at topics including

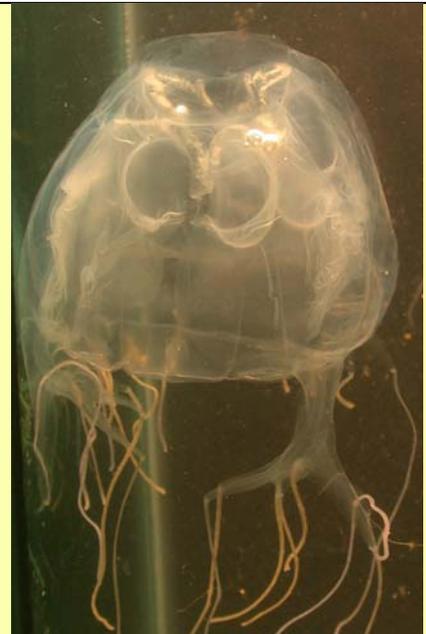
- What should we be doing now to prepare for the next stinger season?
- Lessons learned from the 2005-2006 stinger season
- Proposed updates for the marinestingers.com website
- An upcoming conference on marine stinger management
- Are stingers and stings increasing?

Did you know...

"Chiropsalmus quadrigatus" gets a new name...

The non-fatal Australian box jellyfish species long referred to as *Chiropsalmus quadrigatus* actually bears little structural resemblance to the true Burmese form of this species. Thus, it has been reclassified with the name *Chiropsella bronzie*, named to honour the men and women of Surf Life Saving.

The key characters that distinguish this species from our other common box jellyfish, *Chironex fleckeri*, are the smaller, rounder body; fine tentacles that are round in cross section; and smooth spherical knobs inside the body.



Where to get more information

Emergency sting information	000
Reports of stings or specimens	24/7: 0409 627 869
General safety information	SLSQ (07) 3846 8000
General jellyfish information	SLSQ (07) 3846 8000
Media enquiries	SLSQ (07) 3846 8044
Signage enquiries	SLSQ (07) 3846 8020
Requests for brochures, posters, etc	SLSQ (07) 3846 8000
Requests for speaking engagements	Coord. 0409 627 869
Research info or project ideas	Coord. 0409 627 869
Contributions to newsletter	lisa.gershwin@jcu.edu.au
Add to mailing list	lisa.gershwin@jcu.edu.au

<http://www.reef.crc.org.au/publications/brochures/Moreinformation.htm>
<http://www.marinestingers.com.au/marinestingers/default.htm>

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If stung

by Irukandji / box jellyfish:

1. Call for help (dial '000' or send someone for a lifeguard)
2. Treat the victim (Provide emergency care - CPR if necessary)
3. Treat the sting (flood with vinegar)
4. Seek medical assistance