Box Jellyfish

*Chironex fleckeri*

The Box Jellyfish is considered by many to be the most deadly animal in the world, due to its lethal venom and the amount carried by each jellyfish. They have been responsible for over 60 deaths in Australia, up to the year 2000.

**Description**

Box Jellyfish are pale blue and transparent. It is nearly impossible to see them in the water. They are bell or cubed shaped with four distinctive sides. They measure up to 38cm across. Each corner of the body contains up to as many as fifteen tentacles each 3 metres in length. With a small set of eyes, these jellyfish are capable of sight. The Box Jellyfish moves at speeds of 4 knots in a jet-like motion.

**Habitat**

Box Jellyfish are normally found in tropical waters north of the Tropic of Capricorn in very shallow waters. Generally, they don’t inhabit offshore reefs but can be sighted near inshore islands. They are more numerous after local rain, especially near river and creek outlets when the tide is rising. Box Jellyfish are not normally found over coral, in deep water or around extensive seagrass or weed beds.

**Diet**

Box Jellyfish feed on small fish and crustaceans. It uses its tentacles to kill its prey.
**Life Cycle**

Adult Jellyfish generally live on sandy beachfronts where they grow to sexual maturity and then spawn.

- They shed eggs and sperm into water.
- Fertilised eggs grow into planula and settle on rocks in creeks and metamorphose into tiny polyps.
- Polyps bud and grow until the end of the wet season, and then bud off a single jellyfish approximately 1.5mm in size.
- Small jellyfish make their way to the ocean and feed and grow up to 2mm a day depending on temperature and food availability.
- Jellyfish grow through the season until it spawns and the process begins again.

**Season**

The Box Jellyfish season across the top of Australia starts with the onset of the wet season, usually around October and lasts until approximately April.

**Venom**

All jellyfish deliver their venom using a stinging mechanism. It is delivered via microscopic stinging cells called nematocysts. Around half a million nematocysts per square centimetre are found in the tentacles. Before the nematocyst is fired off it appears like a balloon containing a coiled tube. The balloon is filled with potent venom and when triggered to fire it pierces the victim’s flesh like a hypodermic needle, which delivers the venom.

You virtually have no chance of surviving a large venomous sting, unless treated immediately. Pain is so excruciating, you can go into shock and drown before reaching the shore. Red welts appear with a characteristic ‘frosting’ pattern.
Precautions for Swimming in Tropical Waters

1. Always swim between the flags at a patrolled beach where possible. Lifesavers drag the nets each day to check for stingers and can advise you of any problems you may encounter. They are also trained in first aid.

2. Even when stinger nets are in place you should always wear a stinger resistant suit when in the water. These are lycra or nylon suits that work by removing the biological ‘taste’ if you come in contact with the jellyfish.

3. Swim in a stinger resistant enclosure if they are present.

4. Don’t play on the float surrounding the stinger net as you may expose yourself to stingers or possibly allow stingers to swim over the top of the float.

First Aid – Box Jellyfish Sting

With a major sting from a large Box Jellyfish, death may occur within minutes.

1. Call for help from lifesavers or lifeguards or dial 000

2. Treat the Sting – apply vinegar liberally to the sting area. It doesn’t give any pain relief, but does stop any undischarged stinging cells from firing off. Vinegar is usually found in boxes on beaches or walkways. It is best to take some with you to the beach.

3. Emergency Care – If required, CPR should be applied until professional help arrives.

4. Seek medical assistance. Antivenom is carried by ambulances and hospitals.