

## Dangerous marine animals

The **aim** of this activity is to identify risks that may occur in the field. Students will learn to evaluate the severity and likelihood of different risks and identify strategies to reduce impact of potential risks.

### ACARA curriculum links

Science understanding (ACSSU111)

Science inquiry skills (ACSIS125)



### Background

Risk assessment is the process where you:

- Identify hazards
- Analyze or evaluate the risk associated with that hazard
- Determine appropriate ways to eliminate or control the hazard

In practical terms, a risk assessment is a thorough look at your workplace to identify those things, situations, processes, etc, that may cause harm, particularly to people. After identification of hazards, you evaluate how likely and severe the risk is, and then decide what measures should be in place to effectively prevent or control the harm from happening.

It makes sense to follow advice that will keep us safe and to look after the things we value. Look out for strong currents before swimming, wear a helmet when riding your bike, don't text while driving, don't feed the birds, apply immediate pressure to a bleeding wound. These are tested ideas (some enforced by law) recommended to protect people, assets and the environment. When several ideas are written around a theme, such as tourism, they form a Code of Practice, or Best Practice. We can call this a Code of Conduct.

### Resources

- Department of education and training - Curriculum activity risk assessment - Snorkelling, Open Water. <http://education.qld.gov.au/schools/eppr/health/hlspr012/resources/snorkelopenwater.pdf>
- First aid manual - First Aid for Hazardous Marine Life Injuries, DAN Asia Pacific. [www.danasiapacific.org/main/proddetail.php?prod=INTER](http://www.danasiapacific.org/main/proddetail.php?prod=INTER)
- <http://www.rgs.org/OurWork/Schools/Fieldwork+and+local+learning/Fieldwork+safety/Risk+assessments>
- Fieldguides for your local area

### Instructions

- This activity should be conducted at low tide. Check tides timetable and plan this activity accordingly.
- Split the group into smaller groups and walk over the reef flat in search for dangerous marine animals.
- It can help to laminate ID sheets and provide groups with this.

### Equipment if going in the field

- Booties or reef-walking/old shoes
- Hat, sunscreen, sunglasses
- Water bottle
- Waterproof slate with pencil
- Underwater camera (if available)
- Viewing tube (if available)
- Waterproof ID guide (if available)
- ID reference books

**VENOMOUS MARINE ANIMALS**

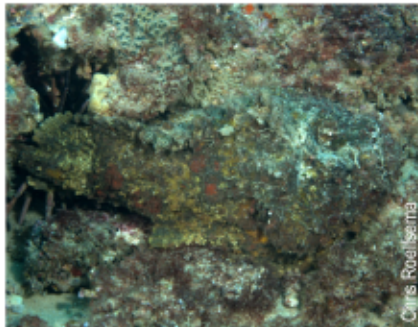
**Tips for avoiding marine injuries**

- Don't touch any marine organism
- Avoid picking up shells
- When in the water, always be aware of your surroundings
- Shuffle your feet when walking into the water in sandy areas
- Always take a first aid kit and manual for marine stings

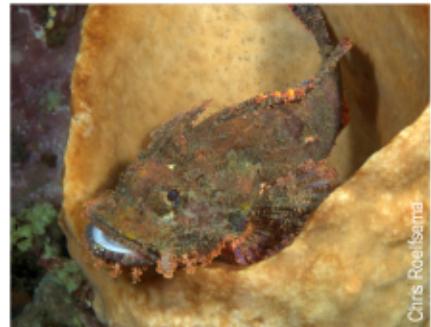
**Before you go out into the field, make sure you have access to up-to-date first aid advice. When in doubt, seek medical care.**



**Stingrays** - When stepped upon, spine can cause immediate pain.



**Stonefish** - Dorsal spines capable of piercing through shoes.



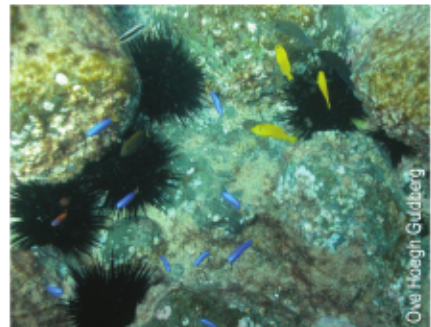
**Scorpionfish** - Tips of fins carry poisonous venom and can affect body part in minutes.



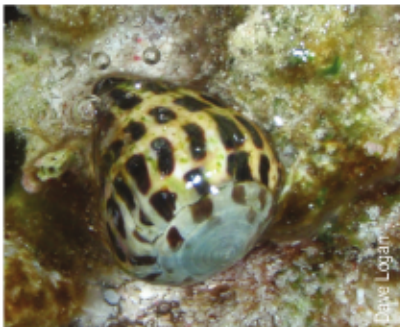
**Lionfish** - Spines have venom and can cause severe pain after a sting.



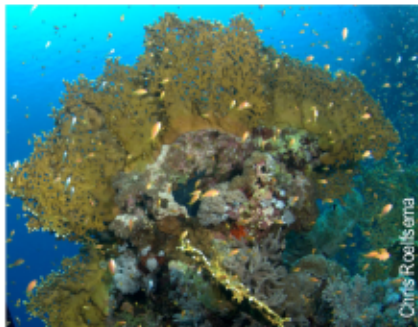
**Blue bottle jellyfish** - Discharge nematocysts and can present complications.



**Sea urchin** - Sharp and brittle spines which can inject poison. Painful.



**Cone shell** - Shoots tiny harpoon (venomous). Painless to excruciating.



**Fire coral** - Tentacles with nematocysts. Prickling sensation to extreme pain.



**Hydroids** - Nematocysts. Stinging sensation to extreme pain.



**Blue ringed octopus** - Serious bite. Painful, can be fatal and needs treatment.



**Box jellyfish** - Nematocysts. Serious sting which is painful and can be fatal.



**Fire urchin** - Stinging sensation to extreme pain.

## Dangerous marine animals

### Instructions

Identify what creatures you might see on your fieldtrip that could potentially be dangerous. Use the following table. You can either draw the animal or find a picture on the internet.

| Picture | Description | First aid treatment |
|---------|-------------|---------------------|
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