



TOOLBOX INFORMATION SESSION

SPIDERS AND INSECTS

INTRODUCTION

In Australia we have a variety of different spiders and stinging insects. The most harmful spiders include the Red Back spider and the Funnel Web spider. Some of the more harmful insects include bees, wasps and mosquitos.

Today we are going to talk about:

- the nature of these creatures;
- how we can best avoid them; and
- how we can identify and treat those affected by them.

Spiders

Australia's two most venomous spiders are the **Red Back spider** and the **Funnel Web spider**.

The Red Back Spider

The Red Back spider is found all over Australia and the female can be identified by a red mark on the back of her black body. The female spider's bite is venomous but deaths from this spider are very rare. The male Red Back spider is smaller than the female, black all over and is harmless.

These spiders like to live in dark corners that are dry and out of the weather. Their homes often include sheds, loose materials like rubbish, rocks and outdoor toilets.

Avoiding Red Back Spiders

The best way to avoid contact with Red Back spiders is to take extra care when in areas where they like to live. Always wear gloves when moving materials or cleaning in these areas.

Symptoms and Treatment of Red Back Spider Bites

If a person is bitten by a Red Back spider you may notice symptoms such as:

- slight swelling around the bite;
- intense pain around the bite;
- sweating;
- nausea and vomiting;
- headache;
- rapid pulse; and
- rapid or shallow breathing.

In very severe cases of Red Back spider bites, the muscles in the area around the bite may become paralysed.

When treating a Red Back spider's bite you should:

- wash the area around the bite;
- apply a cold compress to relieve the pain;
- seek medical assistance; and
- keep watch over the patient for any change in their health.

Do not apply a bandage or tourniquet to the wound, as this will only increase the level of pain felt by the patient. Bandages are not required as the venom of this particular spider moves very slowly.

The Funnel Web Spider (NSW only)

Funnel Web spiders are mainly found around the coastal regions of New South Wales. These spiders build a tubular shaped web and make their home in naturally formed spaces under logs, rocks and tree stumps.

This totally black spider is very aggressive and has large fangs that are extremely powerful. Unlike the Red Back spider the male Funnel Web is five times more venomous than the female. However, both male and female spiders have highly toxic venom and deaths from these spiders are possible.

Avoiding Funnel Web Spiders

In order to avoid Funnel Web spiders you need to take care:

- in the areas where these spiders live;
- when outdoors;
- when in garden areas; and
- after rain, when they sometimes move into houses and buildings.

Symptoms and Treatment of Funnel Web Spider Bites

If a person is bitten by a Funnel Web spider they may have symptoms such as:

- severe pain around the wound;
- increased sweating;
- muscular spasms;
- increased saliva production;
- vomiting;
- breathing difficulty; and
- loss of consciousness.

When treating a Funnel Web spider's bite, you should:

- keep the patient still and reassure them;
- apply a firm, broad bandage or bandages to the bitten area and along the full length of the limb;
- keep the limb still by applying a splint;
- collect the spider if it is dead so it can be identified; and
- send for a doctor or transport the patient to a hospital in a calm and safe manner.

Bees

The most common bee in Australia is the introduced European Honeybee and can be found in most areas of Australia.

The European Honeybee has orange and black stripes across its body. It is approximately 1.5 cm in length and has a fully rounded body.

Avoiding European Honeybees

European Honeybees only sting if they are defending themselves or their hives.

Generally, they do not attack unless they are provoked.

The reason for this is that the act of stinging actually kills the bee. As the sting becomes lodged in the body it detaches from the bee.

You can avoid being stung by European Honeybees if you

- simply leave them alone;
- avoid swiping at them if they land on you; and
- keep away from their hives, as they may think you are going to attack them.

Symptoms and Treatment of European Honeybee Stings

Symptoms of European Honeybee stings include:

- a small barb sticking out of the patient's skin;
- pain and itching at the site; and
- swelling around the area of the sting.

Patients who are allergic to European Honeybee stings may:

- have breathing difficulties;
- have a swollen face;
- have hives;

- have a rapid pulse; and
- collapse.

When treating European Honeybee stings you should:

- scrape off the sting rather than pulling it out of the skin; and
- use a cold compress to reduce swelling or pain in the effected area.

Scraping the sting away prevents more venom being squeezed into the wound from the sac that is attached to the sting. You should use something flat to scrape the sting away such as a fingernail or matchstick.

If an allergic reaction to the sting occurs:

- apply a firm, broad bandage over the effected area; and
- transport the patient to a medical facility as soon as possible.

European Honeybee stings are not usually fatal but can cause death in people who have an allergy to their sting.

Wasps

There are a number of different types of wasps in Australia. We will now talk about wasps in general terms but will look at the European wasp more closely.

You can identify wasps by:

- stripes of black and brown, black and orange or black and yellow across their bodies;
- a body length of 1.5 to 2.0 centimetres or larger; and
- a body shape that is slender, narrow at the waist and pointed at the tail end.

The main difference between wasps and European Honeybees though, is there ability to sting repeatedly.

The European Wasp

European Wasps:

- were introduced to Australia;
- are more common in the eastern states of Australia;
- have been found in Western Australia;
- are attracted to sweet substances and are sometimes found in food and drink containers;
- often sting if they are accidentally handled;
- can be quite aggressive if you disturb their nests; and

- are considered dangerous, as they have been known to cause death.

Avoiding the European Wasp?

You can avoid being stung by a European Wasp if you:

- keep away from wasp nests, particularly during the day;
- keep as still as possible and ignore the wasp;
- wear shoes around garden areas, especially if water is present;
- check any food being eaten outdoors as wasps like to hide in food; and
- use a glass or straw to consume drinks when outdoors.

Do not:

- swat or annoy wasps, as they are attracted to movement; or
- wear heavy perfume or cologne as it attracts wasps.

Symptoms and Treatment for European Wasp Stings

Symptoms of the European Wasp sting include:

- severe pain around the wound;
- immediate swelling; and
- breathing difficulties.

You treat European Wasp stings by:

- moving the patient away from the threat of further wasp stings;
- applying a firm, broad bandage or bandages to the bitten area and along the full length of the limb;
- applying an ice pack to the wound;
- monitoring the patient for any allergic reaction; and
- seeking medical aid as soon as possible.

Mosquitos

In Australia there are more than three hundred different types of mosquitos. Mosquitos are blood sucking insects and transmit a variety of different diseases to both humans and animals. These diseases include:

- Ross River virus;
- Australian encephalitis;
- Barmah Forest virus; and
- in very rare cases Malaria.

These insects are small and fragile but have very strong mouthparts that easily penetrate the skin. Both male and female mosquitos feed on plant nectar, but female mosquitos also require the protein found in blood to mature their eggs. When the female probes the skin's surface in order to find blood, she also injects her saliva that may carry a number of different diseases.

Avoiding Mosquitos

You can avoid being bitten by mosquitos by:

- staying indoors when mosquitos are most active, one to three hours after sunset and before dawn;
- keeping outdoor activities to a minimum when mosquitos are most active;
- wearing clothing which covers as much of the body as possible and is loose, as mosquitos can bite through even thick clothing if it is close to the skin;
- wearing insect repellent in the form of a lotion; and
- keeping away from areas that are known to be infested with large numbers of mosquitos.

You can stop mosquitos from breeding at work and at home by, making sure water is not left lying uncovered for any length of time, as mosquitos lay their eggs on the surface of still water and only need a week or so to breed.

Symptoms and treatment of mosquito bites

Symptoms of a mosquito bite usually include:

- swelling;
- redness; and
- irritation around the puncture site.

People who have an allergy to insect bites may have a slightly more severe reaction, including:

- a slight fever;
- severe swelling;
- blistering;
- bruising; and
- a very hot, red and inflamed area around the bite.

You can treat the mosquito bites by:

- applying a cool compress to the area; and
- applying anti itching products to help reduce the effects of the bite.

If you have a severe allergic reaction to a mosquito bite seek medical advice from your pharmacist or doctor.

Summary

Both the Red Back spider and the Funnel Web spider are considered dangerous to humans and it is important to keep watch for these spiders when in the areas they inhabit.

If a person is bitten by either of these spiders, carry out first aid immediately and seek medical assistance as soon as possible.

Both European Honeybees and all types of wasps will only sting you if you are near their nests, or they are threatened by you. Keep out of their way as much as possible but if stung, carry out first aid immediately.

Mosquitos carry a number of potentially serious diseases. These diseases can be passed on to humans when the female mosquito probes the skin in order to find blood.

You can avoid mosquito bites by:

- staying indoors at sunset and dawn;
- emptying or covering containers which carry water;
- keeping away from known mosquito areas;
- wearing loose clothing which fully covers the body; and
- using insect repellent in the form of a lotion.