



Welcome and housekeeping

1. Welcome participants and introduce yourself.
2. Hand out the attendance list.
3. Ask participants to sign it and return it to you at the end of the presentation.
4. If necessary point out the emergency exits and emergency procedures.
5. If necessary point out the toilets and kitchen facilities.



Safety Share: Snakes

Does anyone have a snake safety share?

- What happened?
- What were the consequences?
- What did you learn by it?

1/16

Safety share: snakes

Welcome - firstly let's start our session with a "Safety share."

ASK: Has anyone got a story to share about an incident that involved snakes?

- What happened?
- What were the consequences?
- What did you learn by it?

<brainstorm with the group>



Be smart around snakes

Stupidity gets man bitten 9 times by poisonous snake

26 January 2009

This incident from Darwin, Australia makes one marvel at the limitless idiocy of homo sapiens.

According to a newspaper report, local resident Gordon Lyons had his **left arm amputated after being bitten by a deadly snake nine times**. He said he almost died after his heart stopped thrice on the operating table. **He spent seven weeks in a coma and was kept alive with a dialysis machine and ventilator after a king brown snake bit his left arm two months ago.**



Lyons, who has still not regained movement in his legs, said doctors revived him three times on the operating table.

Admitting to being drunk at the time, he said he remembered his friends at the local pub wanted something to put in their huge fish tank. "But I made the stupid mistake of grabbing it with my left hand, because I was holding a beer in my right one. I had its head in my hand, but it got loose and grabbed the web of my left hand... its fangs were that big it ripped my hand open.

"I tore it off me and put it in a plastic bag and threw it in the back of the car.

"For some stupid reason, I stuck my hand back in the bag and it must have smelled blood, and it bit me another eight times."

Saying he began vomiting and suffering diarrhoea "about three seconds later", Lyons continued, "My mate was trying to keep me awake by whacking me in the head and pouring beer on me."

Lyons said his last memory was passing out, covered in blood, at a local hotel moments before being taken to the Royal Darwin Hospital.

A specialist physician at the hospital said the venom had caused severe damage to Lyon's muscles, which led to his left arm turning black and becoming "dead".

The doctor said, "Of all the snake bites in Australia I'm aware of, this man is the sickest to have ever survived."

<http://www.milday.com/opinion/2009/jan/260109-Gordon-Lyons-Arm-amputated-snake-bites-9-times-Sydney-Khalidoscope-Royal-Darwin-Hospital.htm>

Be smart around snakes

You can avoid being bitten by a snake by treating them with respect.

In 2008, a man was bitten 9 times by a King Brown snake and spent 7 weeks in a coma, eventually needing his left arm amputated. He was bitten because, when drunk, he grabbed the snake to take home and put in his fish tank. After the first bite, he tore the snake away, stashed it in a plastic bag, then later in the car stuck his hand in the bag where the snake then bit him another **eight** times.



Snake safety

The objective of this session is to raise your awareness about snake safety by providing:

- an understanding of what snakes are
- an awareness of the types of snakes in the Northern Territory
- a description of the symptoms of a venomous snake bite
- guidance on treating a snake bite
- an overview of how to prevent a snake bite.

1/18

Snake safety

Around Darwin, snakes are most commonly seen in September and April. They are mainly found in the wild, but can venture closer to humans to access food and water.

Some snakes are dangerous to humans, thus we all need to be aware of snakes. The objective of this session is to raise your awareness about snake safety by providing:

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What are snakes?

Snakes...

- are reptiles, like lizards and crocodiles
- are timid and travel through long grass or under shrubbery and debris
- can have toxic venom strong enough to kill humans though most do not
- use the sun instead of metabolism to keep warm
- hang out where they have access to food and they can hide, such as waterways, sheds, composts, covered woodpiles, rabbit burrows, and sheds.



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What are snakes?

There are about 2500 snake species in the world. In Australia, we have only 110 land and 32 sea snakes.

So why is everyone talking about the dangers of snakes in Australia?

Well, Australia is the only country, or region, that has **more** venomous snakes than non-venomous species. But **not all** of the snakes considered poisonous have venom that is capable of killing humans or even to cause severe illness. Snakes can be found all over Australia, not only in the outback. However, you will hardly see them. Contrary to popular belief, snakes are timid. They do not like to cross open ground where they are exposed to birds of prey. They travel through long grass, leaf-litter or under shrubbery or debris.

Snakes are attracted by potential food and good places to hide. For example, waterways are home to frogs, whilst sheds, composts and covered woodpiles attract rats and mice.

Snakes use the sun, instead of their metabolism, to keep warm by basking in direct sunlight or cuddling up to warm surfaces, such as rocks, which have been heated by the sun earlier in the day.

On cool days, snakes enter warm, insulated hideouts like rabbit burrows, wood piles or compost heaps. In hot weather, they are more likely to slip under houses or into sheds with nice, cold concrete floors.

Text from: www.snakesense.com/snake-catching-service/snake-safety/



Types of NT snakes

Pythons are generally non venomous.

The venomous snakes are:



Western brown



King brown



Brown tree snake



Death adder



Black whip snake

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Types of NT snakes

ASK: What are some snakes you know that live in this area?

<brainstorm within the group>

Solution:

<show text and images>

There are many types of snakes found in the Northern Territory. Of these, some are venomous to humans.

If you see a snake, it is best to assume it is venomous. Some of the non-venomous and venomous snakes that you might see in the Northern Territory are:

Pythons, which are generally non-venomous, such as the **Black-Headed Python** that grows up to 2.6 metres long.

The **Western Brown** snake is highly venomous and aggressive. It varies in colour, often with a black Y shape on neck and may be banded. The underbelly is cream to yellow with orange blotches, and it grows to 1.5 metres.

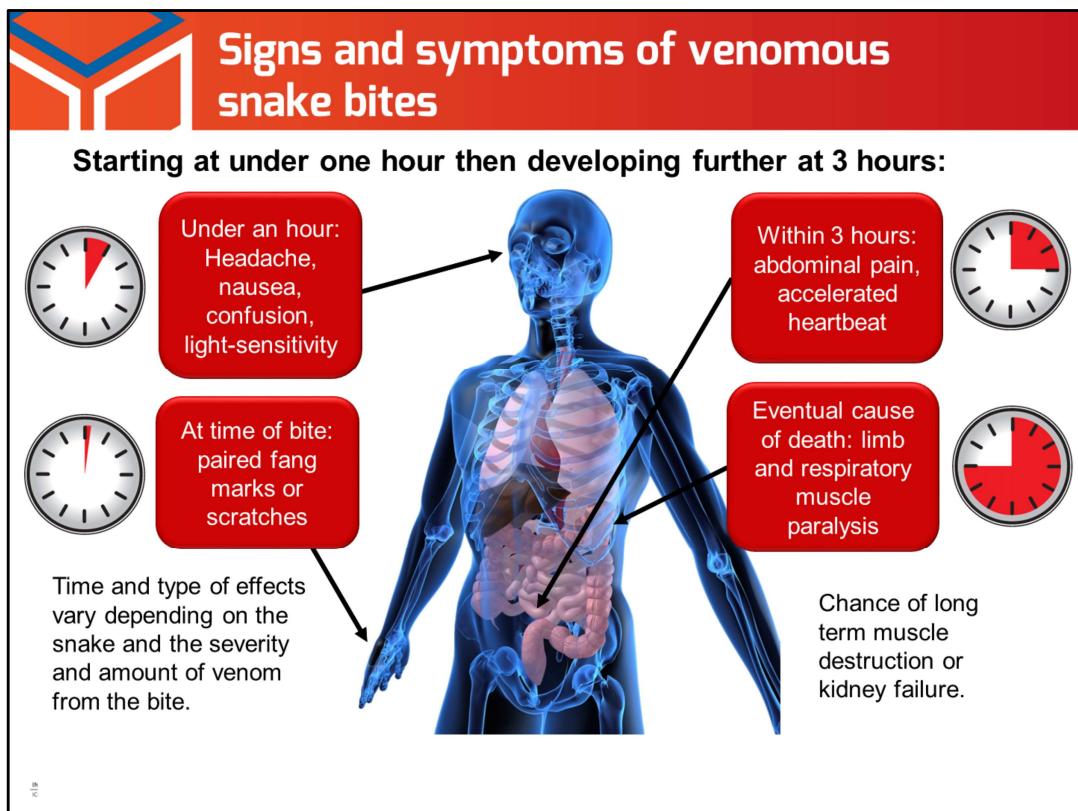
The **Black Whip Snake** is venomous, and shy unless provoked. It is black to dark brown with a paler head and reddish whip like tail, and grows to 1.5 metres.

The **Death Adder** is highly venomous and is short and stubby, growing to 1.2 metres. It has a very pronounced broad head with raised ridges above the eyes.

The large **King Brown** is a highly venomous snake that grows up to 2.5 metres. It is variable in colour from a pale brown to olive and rich reddish brown or copper. It has a cream to white underbelly.

The **Brown Tree Snake** is mildly venomous, and may become aggressive if threatened. It is nocturnal, generally lives in trees and has brown to red to orange bands.

If you can identify a snake, you can reduce the time medical professionals take in identifying the correct anti-venom if you have been bitten.



Signs and symptoms of venomous snake bites

Due to the stealthy nature of most snakes, sometimes you may not know you've been bitten. That's why it's important to recognise the signs of venomous snakebites in yourself and others.

From the time of the snake bite to around three hours afterwards your body will undergo changes.

The bite site is usually painless. It may have classical paired fang marks, but this is not the most common picture. Often there are just a few lacerations or scratches, and sometimes these may be painless or go unnoticed. Bruising, bleeding, and local swelling may be present, but significant local tissue destruction is uncommon in Australia.

The usual sequence of systemic symptom development goes something like this:

In less than one hour, you may have a headache (an important symptom), irritability, sensitivity to light, nausea, vomiting, diarrhoea or confusion.

From **one to three hours** after the bite, you may feel rapid heartbeat and abdominal pain, and have a drooping eyelid and haemorrhaging.

From **three hours onwards** you will experience limb and muscle paralysis leading to respiratory failure and eventually death.

This sequence of events is highly variable. Brown snake bites, even apparently trivial ones, have been associated with acute deterioration over a five minute period leading to death. This may occur as soon as 30 minutes to an hour after the original bite.

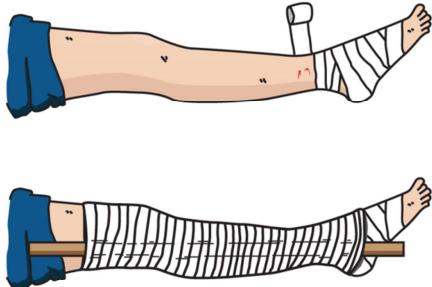
Even if you survive the snake bite, without immediate medical attention, there is a risk of muscle destruction from toxins, which may lead to kidney failure or limb amputation.

Text from: <http://www.anaesthesia.med.usyd.edu.au/resources/venom/snakebite.html#signs>



Snake bite first aid

- call for medical assistance
- do not try to catch the snake
- do not wash wound site
- remove watches, rings, bangles
- do not put ice or lotion on the wound
- apply pressure to wound, preferably with a pressure bandage
- keep the victim still as possible; no walking.



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Snake bite first aid

If you or someone around you has been bitten by a snake, your first aid action greatly helps the chances of survival.

Follow these steps to treat a snake bite:

- Reassure the victim so they don't panic and spread the venom faster.
- Don't cut or wash the wound; do not even touch it. The remaining venom helps medical specialists to identify the snake using a special detection kit.
- Remove watches, rings, bangles and anything else that will become constrictive if the limb was to swell up.
- Don't put ice or any lotion on the wound.
- Don't try to catch and kill the snake. You might also suffer from a bite.
- Apply a pressure immobilisation bandage immediately. It helps to slow down the movement of the venom in the body. Don't make it too firm; it shouldn't stop the blood flow. It should stay in place until a doctor takes care of the victim.
- Wherever possible, bring medical assistance or transport to the victim. Any activity such as walking will make the venom spread faster.



Prevent snake bites

- keep to clearly marked paths
- make extra noise when walking in snake areas such as long grass
- always wear socks and boots
- tap out your boots and shoes before putting them on
- use a torch when walking in the dark
- do not try to catch or kill a snake
- never put your hands where you can't see them
- do not drive over a snake.



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Prevent snake bites

ASK: How do you think we could prevent snake bites?

<brainstorm in the group>

Solution:

<show images and bullet points>

As snakes are generally scared of humans, we can do a lot to prevent snake bites.

Never put your hands into hollow logs and between rocks where you can't see them.

Don't lift large rocks and dead wood, as you could wake up a snake.

Use a torch when you walk around outside in the dark.

Shake out your bag, boots and clothes if you have left them on the ground.

Under no circumstances should you ever attempt to catch or kill a snake. The vast majority of snake bites occur when people are trying to catch or kill snakes: so don't.

It is true that if you drive over a snake, it could become caught up under your car, thus always avoid running over snakes.

When a snake crosses your path, wait and let it slither away. Don't make the snake feel trapped.



If you see a snake

What to do if you see a snake on the work site or living quarters:

- leave the snake alone; do not provoke it
- walk quietly away
- do not try to catch, trap or kill the snake
- do not stamp your feet to make it go away
- call a snake catcher.



Even though this snake is a harmless water python, snakes should not be handled by workers.

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If you see a snake

Snakes generally will not attack humans unless provoked or disturbed and should be left alone if sighted.

If you see a snake on the work site or living quarters, don't provoke a snake, and don't try to catch or kill it. Snakes are protected by law, and it is a criminal offence to harm one. The penalty for harming a snake includes a substantial fine and gaol sentence. There are no exceptions to this rule.

It is also against the law for unlicensed persons to attempt to trap or catch snakes.

If you see a snake, walk quietly away and leave it alone. It will leave of its own accord, or if you would like it removed, call your local snake catcher.



Summary

Snakes are reptiles; some have toxic venom fatal to humans and animals.

They can be found in sheds, composts, woodpiles, long grass and under rocks.

The NT has 5 common venomous snakes.

Venomous snake bite symptoms include headache, abdominal pain, confusion, rapid heartbeat.

Use a pressure bandage as first aid for snake bite.

Wear socks and boots and walk along marked paths.

Do not kill or harm a snake.

Do not try to catch a snake.

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Summary

In this tool box talk we have discussed how important the awareness of snakes and snake bite treatment is in ensuring safety.

Snakes are reptiles that can have toxic venom dangerous to humans. They can be found in areas such as sheds, composts, woodpiles, long grass and under rocks.

The most common venomous snakes found in the NT include the Western Brown, King Brown, Black Whip snake, Death Adder and Brown Tree Snake.

The signs and symptoms of a venomous snake bite include: headache, abdominal pain, confusion and rapid heartbeat. These eventually lead to death.

Treat a snake bite with first aid by applying a pressure bandage and keeping the victim as still as possible.

Prevent snake bites by wearing socks and boots and keeping to clearly marked paths. Do not try to catch the snake. It is illegal to catch or kill a snake.



We are committed to a safe workplace

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We are committed to an IIF Project

We are committed to an injury and incident free project so we ask that you consider snake safety in all tasks you undertake both on and off the job.

- manage your and other's safety when working near snake zones
- assist your mates and team members manage their safety when working near snake zones
- seek assistance if required.

ASK: Do you have any comments or questions?

ASK: Please sign the attendance sheet before you go.

Thank you for your time.

*Please collect the Attendance Sheet and return it to the Training Administrator.
Refer them to the HS Advisor if you can not answer their questions.*

Remind them to sign the Attendance List.

Collect Attendance List and return to the Training/Administration Department for recording in the Project learning management system (LMS).

Source information from:

Common Snakes in the Northern Territory, NT Government, www.nt.gov.au/snake

Rita's Outback Guide, Australian Snakes, www.ritas-outback-guide.com

Snake and Spider Safety Awareness for Employees, <http://www.sssafe.com.au/home>

Snake Sense, www.snakesense.com

Wildcare Inc. NT, <http://www.wildcarent.org.au/index.html>