Snakes of South Africa

South Africa is home to many wonderful snakes as well as other reptiles that cannot be found anywhere else. Learning about them and how to recognize them will help to prevent them from being killed out of ignorance and fear.

# Venomous snakes

In Southern Africa, roughly 11 percent of our snake species are considered dangerous to humans. The vast majority of snakebite victims in Southern Africa survive. However, a bite from a poisonous snake should never be taken lightly and it is thus necessary to be aware of the facts regarding snakes and their venom.

## Types of snake venom

**Cytotoxic venom**

This type of venom is slow-acting and attacks and destroys cells. Snakes that possess this type of venom include spitting cobras, the Rinkhals, stiletto snakes and most adder species. A cytotoxic snakebite will cause swelling and burning pain in the area of the bite, as well as tissue damage. A bacterial infection can also occur in the wound and in serious cases a limb will need to be amputated.

**Neurotoxic venom**

This type of venom attacks the nervous system and is very fast acting. Mambas, the Cape Cobra, the Rinkhals, garter snakes, sea snakes, Coral Snakes and the Shield-nose Snake have this type of venom, but the venom of the Rinkhals and spitting cobras is also cytotoxic at the same time. In recent times, it has been discovered that most cobras’ venom is also both neurotoxic and cytotoxic. Symptoms include difficulty in breathing, dizziness, difficulty in swallowing and blurry vision. Most adders are cytotoxic, but the Berg Adder is neurotoxic.

**Haemotoxic venom**

This type of venom attacks the blood cells and prevents blood from clotting. Back-fanged snakes typically have this type of venom. Symptoms of a haemotoxic snakebite include headaches, bleeding from the mucous membranes, vomiting and severe internal bleeding of all the internal organs. The bite will also not stop bleeding. A Boomslang bite requires its own special antivenom to treat it, and there is no antivenom available for Twig Snake bites. A blood transfusion is the only way to treat a Twig Snake bite.

## Types of snake venom fangs

Nonvenomous snakes don’t possess any fangs, but may have rows of very sharp teeth. They kill their prey by holding them with their teeth and constricting them. Pythons have rows of jagged teeth that can inflict serious wounds. However, egg-eaters have no teeth.

**Hinged front fangs**

Vipers and adders possess this type of fangs. These fangs are long and designed to fold into the roof of the snake’s mouth when it is closed, but can stand erect when the mouth opens. Cytotoxic snakes usually have this type of fangs. The Gaboon Adder is in the Guinness Book of World Records for having the longest venom fangs of any snake at 5 cm long! A tube runs from the venom gland through the fangs.

**Fixed front fangs**

Mambas, cobras, the Rinkhals, garter snakes, harlequin snakes, Shield-nose Snakes, Coral Snakes and sea snakes have these fangs. The small fangs are situated in the front of the mouth and do not fold back when the mouth is closed. Snakes with these fangs are mostly neurotoxic, but the Rinkhals and spitting cobras are largely cytotoxic. The fangs are hollow and venom flows from the venom gland and is injected into the prey via a tube in the fangs.

**Back fangs**

These fangs are grooved and the venom dribbles along the grooved edge and seeps into the wound. Venom is not directly injected into the prey as with the other two types of fangs. The Boomslang and Twig Snakes are the only two deadly snakes with this type of fangs, while stiletto snakes’ bite can lead to a loss of fingers. The rest, such as Red-lipped Snakes, tiger snakes and skaapstekers, are only mildly poisonous and are not considered to be dangerous to humans. Back-fanged snakes are haemotoxic, but the bites from stiletto snakes show symptoms typical of a cytotoxic snakebite.

## Venom of most dangerous snakes

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| **Common name** | **Type of venom** |
| Black Mamba | Neurotoxic |
| Boomslang | Haemotoxic |
| Cape Cobra | Neurotoxic |
| Forest Cobra | Neurotoxic and cytotoxic |
| Gaboon Adder | Cytotoxic |
| Green Mamba | Neurotoxic |
| Mozambique Spitting Cobra | Cytotoxic and neurotoxic |
| Puff Adder | Cytotoxic |
| Rinkhals | Cytotoxic and neurotoxic |
| Snouted Cobra | Neurotoxic and cytotoxic |
| Twig Snake | Haemotoxic |

## Snakebite treatment: Do’s and Don’ts

***Do:***

* Get the person to a hospital as quickly as possible.
* Keep the person calm.
* Try to identify the snake, or at least be able to describe it.

***Do NOT:***

* Cut and suck the wound.
* Give the person alcohol or caffeine.
* Put a tourniquet on – this could actually make the bite a lot worse if the venom is cytotoxic.
* Try to catch or kill the snake responsible for the bite.
* Give the person antivenom unless he/she is in the hospital.

## What if a snake sprays my eyes with venom?

The only spitting snakes found in South Africa are the Mozambique Spitting Cobra and the Rinkhals. The Black Spitting Cobra is found higher up in Southern Africa. Such snakes don’t literally spit their venom, but their fangs are designed to shoot venom out at their enemies. Spitting cobras don’t do this to catch prey. They spray venom into a creature’s eyes when they feel threatened or cornered, especially when an eagle, dog or human tries to attack them.

The first thing to do when a snake has spat venom into your eyes is to wash it out with liquid. Use as much liquid as possible to get the venom out. Water is preferable, but you can use any other liquid such as a cold drink and even urine! Although milk can also work, there are cases where the milk caused an infection in the eye afterwards.

Do not under any circumstances rub your eyes. The venom immediately forms crystals on your eyeballs, and rubbing them will cause these crystals to cut into your eyes and cause permanent damage. If the crystals come into contact with liquid, they will dissolve.

## Most venomous snakes of South Africa

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| **Common name** | **Average length** | **Habitat** | **When active** | **Food** |
| ***Black Mamba*** | 2.8 m | Savannah and forests | Day | Rodents, squirrels, feral kittens, bushbabies and birds |
| ***Green Mamba*** | 1.8 m | Forests, savannah and plantations | Day | Birds and their eggs, bats and chameleons |
| ***Snouted Cobra*** | 1.5 m | Savannah | Night | Toads, rodents, birds and their eggs, lizards and snakes |
| ***Forest Cobra*** | 1.8 m | Forests and savannah | Day | Frogs, small mammals, birds, lizards, snakes and fish |
| ***Cape Cobra*** | 1.4 m | Savannah, Fynbos and Karoo | Day | Rodents, birds, snakes, lizards and frogs |
| ***Mozambique Spitting Cobra*** | 1.2 m | Savannah and forests | Day and night | Toads, birds and their eggs, lizards, snakes and insects |
| ***Rinkhals*** | 1.2 m | Grassland, savannah and forests | Day | Toads, lizards, rodents, birds and their eggs and snakes |
| ***Puff Adder*** | 0.8 m | Various habitats | Night | Hares, rodents, birds, lizards, toads and snakes |
| ***Gaboon Adder*** | 1.2 m | Forests and savannah | Night | Hares, rodents, birds, toads and monkeys |
| ***Boomslang*** | 1.5 m | Savannah, forests and grassland | Day | Chameleons and other tree lizards, birds and frogs |
| ***Twig Snake*** | 1.2 m | Savannah and forests | Day | Lizards, frogs, birds and snakes |

# Snakes in your garden or house

Now and then people can encounter a snake in their garden or house.

* **House snakes** are commonly found near people’s houses. This includes the Brown House Snake, Aurora House Snake and Olive House Snake.
* **Red-lipped Snakes** and **night adders** mainly eat frogs and toads. Thus, any pond in your garden that attracts frogs will also attract these snakes. Dripping faucets also attract frogs. The **Rinkhals** mostly eats toads.
* The **Mozambique Spitting Cobra** often accidently ends up in someone’s house. It is an active hunter which searches for prey during the day and night.
* The **Black Mamba** is often found in people’s gardens and will occupy abandoned buildings.
* The **Flowerpot Snake** is an exotic species imported from Australia. It was accidentally introduced to South Africa and is often found in flowerpots, hence the name. It likes to live in humus-rich soils in and around cities.

***Important note:*** There is no plant you can plant or liquid you can spray that keeps snakes away. Several tests have proved that these do not work and are a waste of money.

*How do I keep snakes away from my house and garden?*

1. Clean up any building rubble, rocks or plant material lying around. These places are good hiding places for snakes.
2. Fix dripping taps, because they attract frogs, which attract certain snakes.
3. Rats and mice attract snakes. Cats are a good way to control rodent populations on your property. However, they may occasionally catch snakes and bring them to your house!

# Brown House Snakes

As its name suggests, the Brown House Snake is often found near human settlements. Sadly, even though this snake is completely harmless, it is often killed on sight.

The House Snake is one of the few snakes in South Africa that is very easy to identify: it has a light stripe that runs from its nose to the back of its head. There is also a second light stripe that runs from its eye to the back end of its jaw. Sometimes light stripes run the front third of its body. These snakes come in various shades of brown.

This snake likes to hide in building rubble, compost heaps, rock heaps and under galvanised iron sheets. You are also likely to find this snake in your garden. It plays an important ecological role in controlling rat and mouse populations. One House Snake can devour an entire family of rodents. They also eat lizards, bats, birds and frogs.

# References

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