

This Flipper Chart gives you all the information needed to treat a snakebite as a Layman.

SASS 2022

## SAFETY FIRST

- Move the snakebite victim to safety to prevent a second bite.
   Although a photograph would be beneficial, it is not necessary to capture/kill/photograph the snake in order to get the correct antivenom
- Stay calm and keep the victim calm. Fear could speed up the spread of venom
- Call the Emergency Services for assistance and transportation to hospital
- It is imperative to circle the site of the bite with a pen if visual. Write the time of the bite on the skin. Document the progression of swelling from the first circle to the rest of the limb or affected area.

### DO NOT...

- · ... suck on the snakebite
- · ... cut into the snakebite
- · ... amputate body parts
- ... apply a tourniquet unless it is a confirmed Black Mamba or Cape Cobra bite and you are more than 90 minutes away from a hospital

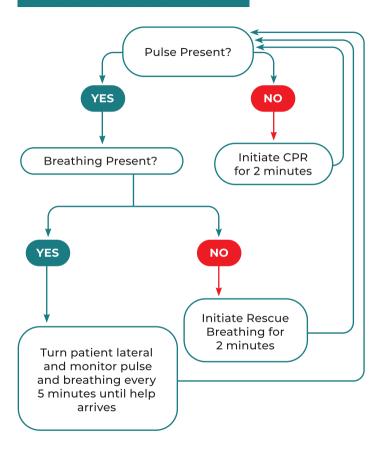
## **EMERGENCY CONTACT NUMBERS**

Provincial Ambulance
Netcare911
ER24
South African Police Service
Tygerberg Poison Control Centre

10177/112 082 911 084 124

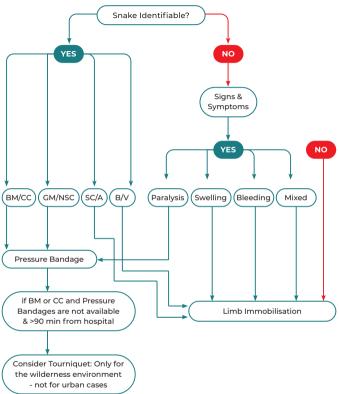
0861 555 777

# **UNCONSCIOUS VICTIM**



If the patient gains consciousness turn the page

# **CONSCIOUS VICTIM**



- \* BM Black Mamba
- \* CC Cape Cobra
- \* NSC Non-Spitting Cobras
- \* GM Green Mamba

- \* SC Spitting Cobra
- \* A Adders
- \* B Boomslang
- \* V Vine Snake



### PRESSURE BANDAGE



- Use an Elastic Bandage and apply it from the fingers or the toes towards the body. A Crepe Bandage is not sufficient for this purpose.
- Apply the bandage tight enough with enough room to place one finger underneath the damage. If more than finger or no finger fits reapply the bandage.
- A costly SMART bandage is available for snakebites which is more user-friendly but not commonly available.
- Once the Pressure Bandage has been correctly applied the affected limb should be immobilised to prevent excessive movement.

### LIMB IMMOBILISATION -



- The aim of the Limb Immobilisation is to prevent excessive movement to slow down the spread of venom.
- Limb Immobilisation can be achieved through splinting, slings, or bandaging the affected arm to the chest, or the affected leg to the other leg (where practical).
- · Once the limb has been immobilised elevate it to a level above the heart.

Regularly check for good circulation by assessing the capillary refill of the affected limb

## **TOURNIQUETS** -



- Tourniquets are not recommended and should not be considered first option for snakebites.
- There is a very small scope for the use of tourniquets regarding snakebite management.
- A tourniquet is only applied if it is a confirmed Black Mamba or Cape Cobra bite and you are more than 90 minutes away from a hospital.
- When used properly a tourniquet can save a life but they do come with complications that can lead to severe tissue damage, amputations and organ failure in severe cases.
- The best tourniquet is one designed for this purpose. Alternative options include a Blood Pressure cuff, a belt, bandage or piece of cloth twisted up until the pulse below the tourniquet is not palpable.
- · Do not use thin materials like wire or shoelaces for this purpose.
- Make a note of the time the tourniquet was applied and inform the medical personnel looking after the victim.
- Remember! Once the tourniquet has been applied DO NOT REMOVE IT!
- · If unsure do not use a tourniquet.

### POLYVALENT ANTIVENOM SPECIES



#### **RINKHALS (HEMACHATUS HAEMACHATUS)**

- · Distribution: Parts of the Cape Provinces, KZN,
  - Mpumalanga, Limpopo and Gauteng
- Colour: Black, brown or olive with white throat bands or black and yellow/orange body bands with yellow throat bands
- · Length: 1.0-1.5m
- · Venom: Cytotoxic & Neurotoxic
- · Venom Effects: Progressive Weakness and
- Paralysis along with Painful Progressive Swelling



#### **PUFF ADDER (BITIS ARIETANS)**

- · Distribution: Throughout SA
- · Colour: Colour varies but has V-shaped markings down the
- back pointing towards the tail
- **Length:** 0.9-1.2m but up to 1.4m
- · Venom: Cytotoxic
- · Venom Effects: Mixed Painful Progressive Swelling & Bleeding



#### **GABOON ADDER (BITIS GABONICA)**

- · Distribution: Coastal Northern KZN
- · Colour: Various shades of pastel colours with blocks along the
- back and triangles down the sides
- · Length: 1.2m can get bigger
- Venom: Cvtotoxic
- · Venom Effects: Mixed Painful Progressive Swelling & Bleeding



#### **BLACK MAMBA (DENDROASPIS POLYLEPSIS)**

- · Distribution: Parts of KZN, Limpopo and Mpumalanga
- · Colour: Dark Olive, grevish brown or gunmetal grev
- · Length: 2.8-3.2m but up to 4.5m
- · Venom: Neurotoxic
- venom: Neurotoxic
- Venom Effects: Progressive Weakness and Paralysis with or without minor swelling



#### **GREEN MAMBA (DENDROASPIS ANGUSTICEPS)**

- · Distribution: KZN along the coastal forests
- · Colour: Uniform green with irregular yellow scales
- · Length: 1.8-2.5m
- · Venom: Neurotoxic
- Venom Effects: Progressive Weakness and Paralysis with or without minor swelling



### MOZAMBIQUE SPITTING COBRA

(NAJA MOSSAMBICA)

· Distribution: KZN, Limpopo

 Colour: Brown with an orange/salmon belly and black bands on the neck

• Length: 1.2-1.6m

Venom: Cytotoxic
 Venom Effects: Painful Progressive Swelling



#### CAPE COBRA (NAJA NIVEA)

· Distribution: Western, Northern and parts of the Eastern

Cape as well as parts of the Free State

 Colour: Varied between yellow, brown, black, cream and a speckled phase

· Length: 1.4-1.6m

· Venom: Neurotoxic

· Venom Effects: Progressive Weakness and Paralysis



# SNOUTED COBRA

· Distribution: KZN, Limpopo and Mpumalanga

 Colour: Yellowish brown with a yellow belly, or black and cream bands

· Length: 1.8-2.5m

· Venom: Neurotoxic & Cytotoxic

 Venom Effects: Progressive Weakness and Paralysis along with Painful Progressive Swelling



#### FOREST COBRA (NAJA SUBFULVA)

· Distribution: Coastal Northern KZN

· Colour: Black back half with a yellowish-brown front half

· Length: 2-2.7m

· Venom: Neurotoxic & Cytotoxic

 $\cdot$  Venom Effects: Progressive Weakness and Paralysis

along with Painful Progressive Swelling

## **MONOVALENT ANTIVENOM SPECIES** -



#### **BOOMSLANG (DISPHOLIDUS TYPUS)**

• **Distribution:** Found throughout South Africa apart from the driest parts and Lesotho

· Colour: Grey, Brown, Green, Red, Blue, Green with Black

"bands", black backs with yellow bellies

Length: 1.5-2.0mVenom: Haemotoxic

· Venom Effects: Bleeding

### **OTHER SPECIES**



#### VINE SNAKE (THELOTORNIS CAPENSIS)

- **Distribution:** Parts of KZN, Limpopo and Mpumalanga
- · Colour: Cryptically coloured resembling a stick
- Length: 1.2-1.5mVenom: HaemotoxicVenom Effects: Bleeding



#### STILETTO SNAKE

- **Distribution:** KZN, Gauteng, Free State, North West, Limpopo. Mpumalanga and Northern Cape.
- · Colour: Body brown to blackish, Belly may be white
- Length: 40-60cm, max 98cm.
- · Venom: Cytotoxic
- Venom effects: Moderate swelling with potential of causing local tissue necrosis.

#### NIGHT ADDER



Photo Credit: Neville's Snake and Reptile Rescue, Eastern Cape.

- Distribution: SA's east coast down to Swellendam, including Gauteng, Limpopo, Mpumalanga and small part of Free State.
- **Colour:** Dark brown Rhombic markings on the back. Body colour varies from light grey to brown. Characteristic "V"shape marking on the head.
- · Length: 40-60cm, Max 1m
- · Venom: Cytotoxic
- $\cdot$  Venom effects: Moderate local swelling and pain.

Even though localized symptoms could seem extreme, there is no antivenom for the treatment of stiletto and night adder bites.

#### DISCLAIMER

The authors and editor have exerted every effort to ensure that the clinical procedures and recommendations described herein are based on current knowledge and state of the art information obtained from acknowledged authorities, texts and journals. However, they cannot be considered absolute and universal recommendations. Each patient situation must be considered individually. The reader is urged to check the package inserts of drugs and equipment and the manufacturers recommendations for indications, contraindications, proper usage, warnings and precautions before use. The authors and editor disclaim responsibility for any adverse effects resulting directly or indirectly from information presented in this booklet, undetected errors or misunderstandings by the readers.