

**This clinical pathway is intended to supplement, rather than replace, professional judgment and may be modified according to a patient's individual needs.
Failure to comply with this pathway does not represent a breach of the standard of care.**

FOR ALL SNAKEBITES VISIT A HEALTH FACILITY IMMEDIATELY!

Eastern Green Mamba
Dendroaspis angusticeps

Egyptian Cobra
Naja haje

Forest Cobra
Naja melanoleuca

Forest Night Adder
Causus lichuanensis

Gaboon Viper
Bitis gabonica

Gold's Tree Cobra
Pseudohaje goldii

Green Bush Viper
Atheris squamiger

Jameson's Mamba
Dendroaspis jamesoni kumusi

Kenya Horned Viper
Bitis lewinyorum

Kenya Montane Viper
Montivipera kenia

Large Brown Spitting Cobra
Hoploporos / Naja ussuri

Mount Kenya Bush Viper
Atheris kassisi

North East African Carpet Viper
Bitis pyrrhus

Puff Adder
Bitis aeneus

Red Spitting Cobra
Naja pallida

Rhinoceros Viper
Bitis nasutus

Rhombic Night Adder
Causus rhombicus

Rough-Scaled Bush Viper
Atheris hispida

Savannah Vine Snake or Twig Snake
Theodorius mossambicus

Small-Scaled Mole Viper
Atractaspis microphala

Snouted Night Adder
Causus deillipii

Velvet Green Night Adder
Causus resusius

Yellow Bellied Sea Snake
Pelamis platurus

Black Mamba
Dendroaspis polylepis

Black Necked Spitting Cobra
Naja nigricollis

Blanding's Tree Snake
Trochodryas blandingii

Boomslang
Dispholidus typus

East African Garter Snake
Eupreobius karekigei

Syndrome	Cytotoxicity (Painful progressive swelling)	Neurotoxicity (Progressive weakness)	Haematotoxicity (Bleeding)
Important snakes	Puff adder, Gabon viper, Kenya Horned Viper, Rhinoceros Viper, Red Carpet Viper, Ashe’s Spitting Cobra, Black-necked Spitting Cobra, Red Spitting Cobra	Eastern Green Mamba, Jameson's Mamba, Black Mamba, Egyptian Cobra, Eastern Forest Cobra, Gold's Tree Cobra	Coastal Boomslang, Northeast-African Carpet Viper (Echis), Vine Snake, Blanding’s Tree Snake
Clinical Picture	Mild: slow, progressive, painful swelling Severe: rapidly progressive swelling and severe pain, ecchymosis, blisters, severe tissue necrosis, abscess formation, pseudo- and true compartment syndrome, nausea and vomiting, hypotension, bleeding tendency, shock, rhabdomyolysis, renal failure	Ptosis, diplopia, dilated pupils, difficulties in swallowing, salivation, progressive difficulty breathing, hypoxia	Early symptoms are usually absent. Symptoms (although delayed) include bleeding at the bite site, bleeding from drip sites, bleeding from mucous membranes and epistaxis. Later complications include haematuria, haemoptysis, melena, cerebral haemorrhage, hypotension and hypovolaemic shock (12 - 36 hours)
Management	- Establish IV access - Give analgesia. Not aspirin or NSAIDs - Position the limb at the level of the heart - Give IV fluid for shock and renal failure - Treat local complications appropriately	- Establish IV access - Monitor oxygenation and ventilation closely (HDU) - Intubation and mechanical ventilation may be necessary - DO NOT USE Succinylcholine for intubation.	- Establish IV access - Give blood/blood component therapy if indicated - Heparin, antifibrinolytics, and thrombolytics are of no value and may be dangerous
Indications for Antivenom Antivenom is NOT INDICATED if the patient is ASYMPTOMATIC Consider antivenom if snake is unknown but envenomation is severe.	Polyvalent antivenom (10 vials) - swelling of whole hand or foot within 1 hour - swelling to the knee or elbow in <6 hours (or two joints above bite site in 6 hours) - swelling of the whole limb in <12 hours - swelling progression >5 cm per hour - discolouration of the skin/necrosis at the bite site - a threatened airway due to swelling - evidence of complication, e.g. compartment syndrome – must get AV before surgery	Polyvalent antivenom (10 vials) - Triad of (either) 1. paraesthesia, 2. excessive salivation/metallic taste and sweating 3. dyspnoea in the absence of painful progressive swelling (mambas) - Paresis in the presence of significant swelling (non-spitting cobras)	Monovalent antivenom (one vial) - Active bleeding - Positive 20 MINUTE WHOLE BLOOD CLOTTING TEST (20WBCT) as early as half- to 1-hour post bite • Take 2 ml of blood from the patient and pour it into a new, clean, dry glass test tube. • The test tube must be made of glass and NOT plastic. The tube MUST be new. Avoid old tubes that have been washed in detergent/soap. • Leave the test tube undisturbed at ambient temperatures for 20 min. • After waiting for 20 min, gently tilt the test tube. • If the blood is all liquid (no clots), then the patient has incoagulable blood. - Laboratory evidence of coagulopathy
Administration of Antivenom: • A physician should be present during administration. • Give a pre-dose of Adrenaline 0.25 mg SC on either thigh, abdominal wall or forearm. • The dose of antivenom varies for the different snakes. A safe approach, when unsure, is to administer 10 vials of Polyvalent AV (PAV) or 1 vial of Monovalent AV (MAV). It may be repeated in increments of two vials of PAV (20 mL) or one vial of MAV (10 mL) over 10 minutes, every subsequent 2 hours, as necessitated by the presence of continued signs and symptoms of envenomation. • Administer antivenom as a 200 mL infusion without test-dosing over a period of 30 minutes. Repeat until symptoms resolve. Monitor breathing and other vital signs continuously. Remember not to let the drip run directly into the wounded limb, which is already at risk from swelling pressure and should be kept elevated and well protected. • Steroids or antihistamines may form part of treatment if anaphylaxis occurs but should not be given routinely prior to antivenom administration. • DO NOT infiltrate the bite area with antivenom.			