



African Snakebite Institute

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REPTILE NEWS

Hi all,

Snakebite Myths:

There are still many myths and superstition surrounding snakebite, first aid for snakebite and the treatment of snakebite. I recently spoke about *Snakebite in southern Africa* at a Travel Doctor's workshop and after my presentation one of the doctors from Limpopo asked me how effective traditional medicine (in the form of herbs and tree bark) is in cases of snakebite as he heard of a case where a person was treated in this manner and, after receiving the medication, threw up a smelly black substance (presumably containing the venom) and then recovered fully. It reminded me of the 100 old year Bushman in the central Kalahari with whom I discussed snakebite treatment. He told me that they give the snakebite victim Condyl's crystals (*Potassium permanganate*) mixed up in a glass of water. The victim then throws up the venom and the snake's fangs. I wanted to know how effective this treatment is and was told that some victims survive and others die. Amazing! There is absolutely no evidence that traditional medicine has any benefit in the treatment of snakebite. One must bear in mind that many snakebite victims where venomous snakes were responsible for the bite received no or very little venom and would survive in any event. Up to 80% of all snakebite victims survive without antivenom. So don't get fooled.

Some folks firmly believe in many of the first aid measures that do not work while some of these measures are outright dangerous. Like tourniquets. Snake venom is absorbed largely through the lymphatic system, not through veins and arteries and by applying a tourniquet to cut off blood circulation you will not slow down the rate at which venom is absorbed. But you may well do serious damage with a tourniquet and the doctors in Zululand often have to deal with snakebite victims where tourniquets have done serious damage, even leading to amputation. And in Puff Adder and spitting cobra bites where cytotoxic venom is involved, the tissue damage is even worse. You are not going to save anyone's life by applying a tourniquet so do not use one.

Cutting and sucking is still popular, fuelled on by cowboy movies in the past and until recently one could still freely purchase cutting and sucking devices from camping stores. Fortunately most of these products are no longer available. It just doesn't work and has been tested extensively. You cannot remove a significant amount of venom by cutting around the site of the bite and applying suction. Even worse, the last thing you want is an open wound that is exposed to infection.

One often hears that more people die from shock and the antivenom than snakebite envenomation. This is not true. Yes, many people are allergic to antivenom and a small percentage of them may go into anaphylactic shock if treated with intravenous antivenom, but doctors counter that by injecting adrenaline. Of all the experienced snakebite doctors that I know of and work with, not a single one has had a patient die of anaphylaxis after administering antivenom. It is also incorrectly believed that the allergic effects of antivenom can be prevented by administering cortisone and antihistamine prior to the antivenom. Again not true.

Another popular myth is that being exposed to antivenom will in all likelihood cause a severe allergic reaction the next time around. So much so that some snake handlers that receive serious bites would rather try and sweat it out without antivenom as they may need it for a more serious bite in future. I have just returned from a snakebite seminar in Spain and discussed this at length with Spanish and Mexican toxicologists and it turns out that this is another myth (which I have believed for many years!). Receiving antivenom will not make you more sensitive and will not increase the chances of an allergic reaction the next time around. The same with exposure to venom. Many people that work with snakes and venom become sensitive to venom and will start sneezing excessively the moment they are exposed to venom or even when cleaning snake cages (this happens to me). This sensitivity to snake venom has nothing to do with bites and will not make you more vulnerable to the effects of snake venom or allergies if you get bitten. They are two entirely different issues and not related. What may happen to a snake handler who is envenomated and receives antivenom, is that in a subsequent bite that is treated with antivenom he or she may well need more antivenom as opposed to the first bite as they body becomes more resistant to the neutralising effects of the antivenom. So in summary, in serious snakebites where envenomation is such that it justifies the use of antivenom, the antivenom may well be life-saving and experienced snakebite doctors are using it aggressively and with very good results.

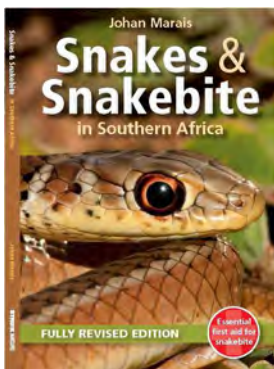
Even in animals there are many myths and stories. I often hear farmers saying that if your dog is bitten, cut a little bit of its ear off so that the venom can bleed out. Or give the dog a little bit of petrol. Absolute rubbish! And if you have a dog that kills a lot of snakes and gets the odd bite, don't think you have a super dog that has super powers to combat snake venom. The reality is that the dog did not receive enough venom to kill it hence the full recovery. It is only a matter of time.

All of this and more has been covered in my new book *Snakes and Snakebite in Southern Africa* that will be on the shelves in September this year.

I am gearing up for a three week reptile research trip in Namibia so the next newsletter will be in June.

Snake Awareness and Venomous Snake Handling Courses:

The next Gauteng course will be at Heia Safari Ranch on Saturday 28 June 2014.



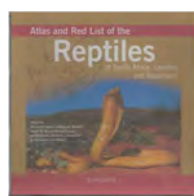
The next Zululand course will be at DumaZulu, Hluhluwe on Saturday 26 July 2014,

Atlas and Red List of Reptiles of South Africa

The Reptile Atlas, a phenomenal publication and the result of 9 years of hard work conducted by seven editors, 28 authors and dozens of photographers, is already sold out and now out of print. At this stage it is unlikely that it will be reprinted but it is available on CD. If you are interested in purchasing the Reptile Atlas on CD, please E-mail me for details.

Dangerous Snakes and Common Harmless Snakes A3 posters

I have now completed the series of **Dangerous Snakes** posters for all eight provinces in Afrikaans and English as well as posters for Namibia, Botswana, Mozambique and Swaziland. These posters can be downloaded free from Dropbox



(<https://www.dropbox.com/sh/if1quk8n2drbfdn/AABIRMn3ky9zY1MXDARfVm8va>) and will all be uploaded to my website. I have also done a **Common Harmless Snakes of Southern Africa** poster. My thanks to Joleen Coetzee who has done an amazing job designing the posters. All of these posters will soon be loaded onto my website. Please feel free to download and print them and to distribute them. You can also share the Dropbox link. For those of you who would like to purchase high quality printed A3 posters, I have printed copies of all of them and the cost per poster is R25 which includes local postage. Corporates can also order these printed A3 posters with their logo on at a very attractive price – E-mail me for details.

Kind regards

Johan Marais

Author of *A Complete Guide to Snakes of Southern Africa*

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