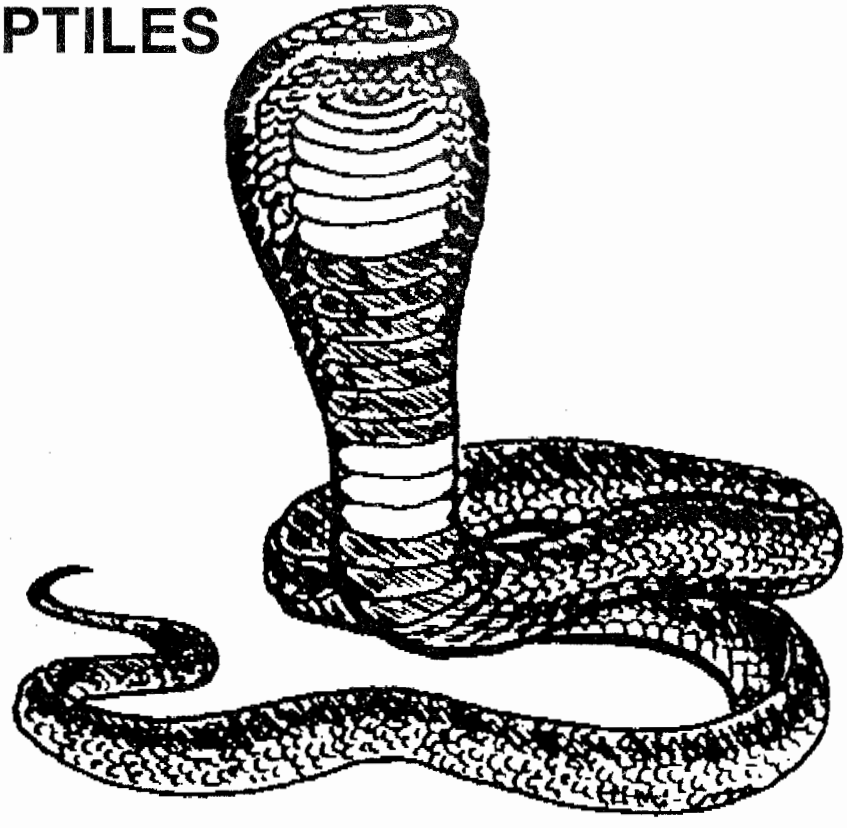
ZOO HELP* *from AZA*** Resouce Centre --
VENOMOUS REPTILES



Editors' Note :

Zoos find it useful (and even necessary) to lay down very specific procedures and protocol for dealing with potentially dangerous situations. One such situation is handling venomous reptiles and responding to accidents, such as animal bites.

The American Zoo Association maintains a Resource Centre in which different zoos contribute the procedures and protocol they employ for dealing with potential and actual crises.

This would be a good project for the Indian Zoo Directors' Association actually -- to gather and maintain such information and include it in the newsletter from time to time.

It is useful to have a starting point and a model when creating such protocols for one's own institution. If your zoo does not have a written protocol for such situations, it is advisable to develop one and post it in appropriate languages in appropriate sections for curators, keepers, cleaner, volunteers, and anyone who comes into contact with dangerous animals. It should be standard equipment for new persons joining the zoo to have a folder of such material to study.

This issue contains two seperate articles, both on venomous reptiles : Staten Island Zoo's procedures for handlings poisonous reptiles and the El Paso Zoo's methodology for dealing with poisonous reptile bites.

As these protocols are from a western zoo culture there may be parts which are not correct for Indian zoos. The idea here is not to provide a product which you can adopt as it is, but simply to suggest the principle of having a written protocol in case you do not have one, and provide a starting point. Every zoo ultimately will have to develop their own.

Zoo Procedures For Handling Venomous Reptiles from Staten Island Zoo

1. No venomous reptiles are to be serviced by anyone except designated personnel.
2. Venomous reptiles are to be serviced only during working hours when at least 2 qualified personnel are in the building.
3. If pinnning of a venomous reptile should become necessary, qualified supervisory staff must first be notified and present.
4. All rear-fanged snakes are to handled with either gloves or a snakehook, depending upon the specimen involved.
5. Treat all "dead snakes" as potentially alive due to reflexive actions.
6. Except for authorized personnel, no one is permitted in the service areas unless accompanied by designated personnel with the approval by supervisory staff.
7. All venomous reptile cages/containers are to be marked immed-iately upon arrival with "venomous" tags.
8. All venomous reptile cages are to have cards on them with the following data which are to kept current at all times:
9. common and scientific name
10. accession (ISIS) number and date

c. which antivenin to use
d. any other pertinent information

11. If at any time a venomous reptile appears to be missing, supervisory staff must be notified immediately
12. No venomous reptile is to be removed from the building without the authorization of the General Curator or Director.
13. Departure from the zoo grounds by on-duty reptile keepers must be reported to the supervisory staff with a comment on destination.
14. All doors to the service areas are to be dosed and locked at all times.
15. Designated personnel will ensure that the AZA "Antivenin Index" and the Staten Island Zoo's Snakebite Emergency Manual are current and available at the antivenin refrigerator comer of the service area.

*** ** See notes in ZOO HELP elsewhere in this issue.**

El Paso Zoo Venomous Animal Bite Procedure

The El Paso Zoo houses several venomous reptiles. All snake/venomous lizard bites are to be reported to the daily supervisor, to the administration office and the following procedures followed. Each employee has a role in this process. Every staff member must be familiar with these procedures and know their particular responsibilities.

Personnel

Person in Charge: The person in charge (PIC) will depend upon which staff members are on the grounds. In descending order, the person in charge will be: Veterinary Services Manager, Animal Curator, Veterinary Technician, or Designated Animal Care Supervisor of the day.

Keepers: Keepers includes all other trained animal care personnel (Keepers, Senior Keepers, Area Supervisors, Diet Specialist Collections Supervisor, etc.)

Victim: The person who has been bitten.

Assistant: Another person who was helping in the reptile house.

Other Staff: AR other, non-collections uniformed staff (Facilities, Education, etc.)

Administration: Administration Office Clerical Staff, Administrative Analyst, etc.

Procedures

Victim or Assistant:

1. Turn on the alarm switch located above the sink in the reptile house, on the wall across from the entrance door in the beaded lizard room, or near the door in the clinic.
2. If possible, put the venomous reptile in a secure container. If this is not possible, pay close attention to the animal's location.
3. Use your radio or the reptile house phone to notify the PIC of the situation.
4. Initiate Emergency First Aid.

Keepers

1. Identify location of bite by observing flashing light on the building, respond to alarm, and verify snake or venomous lizard bite.
2. Obtain the truck keys from the administration office and have the truck ready to go.
3. Open the perimeter gate adjacent to the maintenance complex and stand by.
4. The first keeper responding to the snake alarm should enter the reptile house/Lizard room/clinic (break down the door if necessary) and analyze the situation. If the victim is alone and the reptile is loose, wait for a qualified reptile keeper to secure the venomous reptile. As safely as possible remove the victim from the building. Close and secure the building, and help initiate emergency first aid.
5. Make positive identification of the reptile which bit the keeper. Retrieve the reptile's I.D. card and take the information ro the hospital with the victim. Give this information to the PIC. If the reptile's I.D is unknown or unavailable, report this information to the PIC.
6. As soon as transportation arrives, carry or assist the victim into the vehicle.
7. Help clear a safe path through the public for the green cart.
8. Transfer the victim to the waiting truck, exit the back gate and proceed to Thomason General Hospital (emergency room entrance) as quickly and safely as possible.

Person in Charge

1. Responds via radio and announces the situation to all units.
2. Verifies snake bite through first keeper responding to the reptile bite.
3. Coordinates response of keepers and other staff.
4. Provides information to the administration office.
5. If necessary, consults the AZA Antivenom Index (or equivalent for your country) for the availability of additional antivenin and provides this information to the hospital.

Administration

1. Notifies Thomason General Hospital of a venomous reptile bite at 544-1200, extension #1 17.
2. Explains the situation to the hospital and gives them the information regarding the bite.

Other Staff

1. Assist with clearing a safe path through the public for green cart carrying the victim
2. Unless otherwise directed, keep clear of the area.

Venomous Reptile Emergency First Aid

These steps are employed for all venomous snakebites and lizards of the genus Heloderma.

1. Remove rings, bracelets, etc. from limbs before swelling becomes too great.
2. Apply suction over fang punctures by using the available venom extractor.
3. Keep the bitten limb as immobile as possible and keep the victim calm

Emergency Snake Bite Kit

These kits will be located above the sink in the reptile house, to the right of the door in the beaded Lizard room and on the metal shelves in the surgical room of the clinic. The kits will include:

1. Antiseptic Isopropyl swabs and Betadine swabs.
2. Two venom extractors.
3. A bandage to help keep limb immobilized.
4. A copy of the Emergency Snakebite Procedure.

Editor's Note : Many of the items mentioned in this protocol don't apply to India. Not all zoos have radios, phones in animal houses, zoo vehicles, etc. However you can make a protocol utilising some of the actions suggested here. How many zoos in India have a snake bite kit on site of the reptile house ? This is a basic item. Having a specific hospital on standby and their phone number handy is also a basic precaution. There is much that can be done to prevent accidents as well as to save the day when one occurs.