



Guidelines for the management of snake-bites



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Contents

Acknowledgements	v
Foreword	vi
Preface to the second edition	vii
1. Executive summary	1
2. Prevention	5
2.1 How can snake-bites be avoided	5
2.2 Implementing preventive strategies for community education	7
3. Venomous snakes of South-East Asia	9
3.1 The venom apparatus	9
3.2 Classification of venomous snakes: Medically important species in South-East Asia Region countries	11
3.3 How to identify venomous snakes	32
4. Snake venoms	33
4.1 Venom composition	33
4.2 Quantity of venom injected at a bite, "dry bites"	34
5. Epidemiology of snake-bite in South-East Asia Region	35
5.1 Introduction	35
5.2 Determinants of snake-bite incidence and severity of envenoming	36
5.3 Epidemiological characteristics of snake-bite victims	37
5.4 Circumstances of snake-bites	37
5.5 Snake-bite as an occupational disease	38
5.6 Death from snake-bite	38
5.7 Snake-bite in different countries of SEA Region	39
6. Symptoms and signs of snake-bite	47
6.1 When venom has not been injected	47
6.2 When venom has been injected	47
7. Management of snake-bites in South-East Asia	61
7.1 Stages of management	61
7.2 First-aid treatment	61
7.3 Transport to hospital	63
7.4 Treatment in the dispensary or hospital	64
8. Species diagnosis	71
9. Investigations/laboratory tests	73
9.1 20-minute whole blood clotting test	73
9.2 Other tests	73
10. Antivenom treatment	77
10.1 What is antivenom?	77
10.2 Indications for antivenom treatment	78
10.3 Inappropriate use of antivenom	78

10.4	How long after the bite can antivenom be expected to be effective? ..	79
10.5	Antivenom reactions	79
10.6	Selection, storage and shelf life of antivenom	83
10.7	Administration of antivenom	84
10.8	Dose of antivenom.....	86
10.9	Recurrence of systemic envenoming.....	88
10.10	Criteria for repeating the initial dose of antivenom	89
11.	Conservative treatment when no antivenom is available.....	91
12.	Supportive/ancillary treatment	93
13.	Treatment of neurotoxic envenoming.....	95
13.1	Introduction.....	95
13.2	Practical guide to airway management and respiratory support	95
13.3	Trial of anticholinesterase	106
14.	Treatment of hypotension and shock	109
15.	Treatment of oliguria and acute kidney injury	111
15.1	Oliguric phase of renal failure.....	111
15.2	Prevention of renal damage in patients with myoglobinuria or haemoglobinuria	114
15.3	Diuretic phase of renal failure.....	114
15.4	Renal recovery phase.....	115
15.5	Persisting renal dysfunction.....	115
16.	Haemostatic disturbances	117
16.1	Dangers of venipuncture in patients with haemostatic abnormalities	117
17.	Treatment of the bitten part	119
17.1	Bacterial infections	119
17.2	Compartmental syndromes and fasciotomy.....	119
17.3	Rehabilitation.....	121
18.	Management of cobra spit ophthalmia	123
19.	Management of snake-bites at different levels of the health service	125
20.	References and further reading.....	129
Annexes		
1.	Algorithm: Diagnosis of snake-bite cases based on clinical data	137
2.	Antivenoms for treatment of bites by South East Asian snakes.....	140
3.	Pressure-immobilisation and pressure pad.....	145
4.	Measurement of central venous pressure	147
5.	Measurement of intracompartmental pressure in tensely swollen snake-bitten limbs	149
6.	Experts who contributed to the guidelines	151

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Foreword



Snake-bites are well-known medical emergencies in many parts of the world, especially in rural areas. Agricultural workers and children are the most affected. The incidence of snake-bite mortality is particularly high in South-East Asia.

Snake antivenom provides a specific lifesaving measure. The current annual need for the treatment of snake-bite envenoming amounts to 10 million vials of antivenins. Unfortunately, the present worldwide production capacity is well below these needs. This trend needs to be reversed through concerted actions by national, regional and world health authorities and manufacturers and through effective public–private partnership. The prevention of mortality and morbidity depend upon availability of antivenom in the health facilities in these settings and their rational use. Mechanisms need to be developed to ensure access to antivenom by all needy patients. The health system needs to respond to this challenge and logistics must be put in place to ensure timely availability of antivenom at the point of use.

WHO/SEARO had developed guidelines on the management of snake-bites which were also published as a special issue of the *Southeast Asian Journal of Tropical Medicine and Public Health* in 1999. WHO has supported countries in developing similar guidelines. To keep pace with the advances in science and on the basis of global experience, the regional guidelines have now been revised.

I hope that these guidelines will help Member States to improve their management of snake-bites, especially in the peripheral health services and shall be useful in saving human lives and mitigate misery due to snake-bites.

A handwritten signature in black ink that reads "Samlee Plianbangchang".

Dr Samlee Plianbangchang
Regional Director

Preface to the second edition

Geographical coverage

The geographical area specifically covered by this publication extends from India in the west to DPR Korea and Indonesia in the east, Nepal and Bhutan in the north, and to Sri Lanka and Indonesia in the south and south-east. Snakes inhabiting the Indonesian islands east of Wallace's line (West Papua and Maluku Islands) are part of the Australasian elapid fauna, differing from those west of this line.

Snake-bite is a neglected tropical disease

Early in 2009, snake-bite was finally included in the WHO's list of neglected tropical diseases http://www.who.int/neglected_diseases/en/ confirming the experience in many parts of this region that snake-bite is a common occupational hazard of farmers, plantation workers and others, resulting in tens of thousands of deaths each year and many cases of chronic physical handicap (WHO, 2007; Williams, 2010). Much is now known about the species of venomous snakes responsible for these bites, the nature of their venoms and the clinical effects of envenoming in human patients.

Antivenoms are essential drugs

The only specific antidotes to snake venoms are immunoglobulin antivenoms which are now recognised as essential drugs (19.2 Sera and immunoglobulins) http://www.who.int/selection_medicines/committees/expert/17/sixteenth_adult_list_

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