CONTENTS

	Foreword	iii
	Acknowledgements	vii
1	Introduction	1
2	The relative danger of snakes	5
	Snakebite and envenoming: a global perspective	5
	Snakebite envenoming morbidity and mortality: public health problems of poverty and economic disadvantage	7
	Risks from snakes: some further considerations	8
	Venom lethal potency and risk: incorrect perceptions and valid concerns	8
3	Morphology and general features of snakes	17
	Basic properties and features of snakes	17
	Front-fanged snakes, non-front-fanged ('rear-fanged') snakes	18
4	Identification of dangerous snakes	47
	Mistaken identity 1	47
	Mistaken identity 2 (or not?)	48
	Snake scalation	51
	Key to identification of medically important elapid snakes in Australia	53
5	The dangerous snakes described	71
	Terrestrial snakes	72
	Sea snakes and sea kraits	144
6	Conservation of Australia's dangerous snakes	187
	Conservation terms	187
	The threats on venomous snakes including medically important species	188
	The road to recovery: solutions, viability and pragmatism	210
	Biological control revisited: a delicate balance	212
	Raising funds for habitat restoration and conservation	214
	Laws and limits: statutory regulations and the purported 'toll' of collecting	214
	Native animals as pets	217
7	Production, actions and uses of venoms	221
	The adaptive significance of snake venoms	222
	Venom functions: an evolved armamentarium in the pursuit of prey	224
	Venom production	226

V

	Venom components	230
	Procurement of snakes for venom collection	235
	Effective venom production and captive husbandry	237
	Venom extraction and safety	237
	Antivenom	238
	Snake venom for research: venom fractionation and characterisation	239
	Some representative uses for venoms: from antivenoms to potential	
	pharmacotherapeutics	239
	Snake venom research: realities and the future	245
8	Snakebite and envenoming: risks, realities and clinical management	247
	Snakebite envenoming in Australia	247
	Snakebite prevention	248
	First-aid and first-response actions for snakebite envenoming	253
	Management of envenoming in the hospital	258
	Medico-legal issues/pitfalls	272
	Discharge and follow-up	272
	Long-term considerations/prognosis	272
	Australia's venomous snakes and their medical importance	273
	Other medically important or potentially medically important species less frequently involved in human envenoming	303
	Snakes of lesser medical importance	309
	The future of snakebite management: possibilities and probabilities	311
9	Snakes and people	321
	Risks	322
	Do we need to remove snakes?	323
	Evaluation and impacts of relocation	324
	How to avoid snakebites	325
	Sea snakes: risks and realities	326
	Benefits of having snakes around us	328
	Appendix 1. The pioneers of venom production for Australian antivenoms	330
	Early 'snake men'	330
	Twentieth century venom producers and snake handlers	332
	Other snake handlers	351
	Glossary	352
	References	363
	Index	409