## Toxicology Handbook

Lindsay Murray, Frank Daly, Mark Little and Mike Cadogan\*

\*2nd edn, xii + 529 pp, paperback with illustrations, ISBN: 978-0-7295-3939-5. Sydney, Churchill Livingstone (Imprint of Elsevier), RRP: \$69.95, 2010.

There are many excellent toxicology textbooks available internationally, including the recently published 9th edition of Goldfrank's Toxicologic Emergencies.<sup>1</sup> These are wonderful resources for those seeking a full and detailed understanding of toxicology but don't always meet the needs of the clinician at the bedside. They are often large texts, difficult to access quickly and written from a US perspective. Clinicians faced with managing an overdose, poisoning or envenomation need a resource that is easy to access, easy to navigate and offers practical solutions to problems in the Australasian context. The Toxicology Handbook, now in its 2nd edition, and written by Australian authors, provides this and is establishing itself as one of the leading reference manuals in Australasia in the fields of both toxicology and toxinology.

The 2nd edition of the *Toxicology Handbook* is a small (A5) 529-page publication that is portable and easy to use. It includes a table of Contents, Foreword, Preface, list of Authors, Contributors and Reviewers, six Chapters, 166 Sections, six Appendices, and an Index. There is no bibliography although references are provided in each section, which is more useful for the reader. Importantly the 2nd edition has online support, with searchable full text able to be activated via a PIN provided on the inside cover of the manual.

While the 2nd edition of the *Toxicology Handbook* now forms part of the "Student Consult" series, both its described primary target audience and usefulness extend far beyond this. The stated target audience is "hospital-based doctors at all levels", presumably in Australasia, with suggestions that it would also be a useful resource for paramedics and pharmacists. Community practitioners could equally be added to this list, especially those in rural practice while some aeromedical retrieval services have already adopted the text as a core resource. Its utility is best summarised by the fact that it is now the core reference for Australian Poisons Information Centres.

The Chapters are grouped and colour coded and include in order "Approach to the poisoned patient"; "Specific considerations"; "Specific Toxins"; "Antidotes"; "Envenomings"; and "Antivenoms". The largest chapter is that on specific toxins, which discusses 78 toxins listed alphabetically from Alcohol to Warfarin. The colour coding of chapters and alphabetical listing are examples of the practical nature of the manual. The structure of each toxin section has also been well thought out to promote ease of use. Inclusions such as the bold font summary of the toxin at the start of each section and the very useful "Handy Tips", "Pitfalls", and "Controversies" are of particular note. The separation of the Paracetamol section into acute and repeated is helpful, while the clinical experience of the authors is evident in the practical nature of a number of their recommendations. These include stating the lack of indication for blood tests in children in certain overdoses (e.g. rodenticide) and geographical differentiation based on risk for 'big black spider bites', which also reveals a dry sense of humour in a reference text.

The chapters on Envenomings and Antivenoms have been updated significantly in line with new evidence and are essential reading for most clinicians in Australian practice. While there is a lack of information on envenomation syndromes from overseas this should not be an issue in a predominantly Australasian text. While Australia has exported redbacks overseas, fortunately the favour has not been returned. Updated sections include a major review of snake bite management and snake antivenoms; new chapters on mushroom poisoning, plant poisoning, amphetamine abuse and solvent abuse; new chapters on poisoning with newer anticonvulsant drugs, barbiturates, button batteries, chloral hydrate, local anaesthetic agents, quinine and tramadol; and a new antidote chapter on intravenous lipid emulsion.

The Appendices include "Poisonings Information Telephone Numbers", "Example ECGs", "Conversion factors and therapeutic ranges for important toxins", "Alcohol Pathways", "Therapeutic Overwarfarinisation", and "Management of Allergic Reactions to Antivenoms". A note for future editions might be an additional appendix on the use of a Venom Detection Kit for those seeking a 'one stop shop'.

The only suggestions for improving this text really represent the esteem the text is held in rather than failings of the text itself. A new edition is inevitable as new agents are developed and future research, particularly in the field of envenomation, is conducted. There is also the question of the inclusion of herbal remedies and substances such as hazardous materials and radio-active isotopes. The increasing use of this text as a 'go to' resource also suggests the possible inclusion of side effect and toxicity management for hospital based therapeutic agents such as heparin and thrombolytic agents. The challenge for the authors will be to keep future editions of the manual to a manageable size.

The authors are all Emergency Physicians active in clinical practice in Australia. Lindsay Murray is also a Clinical Toxicologist at Sir Charles Gairdner Hospital in Perth; Frank Daly is Director of the Emergency Department and Consultant Clinical Toxicologist at Royal Perth Hospital; Mark Little, who has recently moved to Cairns is listed in his previous role as Consultant Emergency Physician and Clinical Toxicologist, Royal Perth Hospital. All of these three also contribute to the on call Consultant Toxicologist support to the Australian Poisons Information Centre. Mike Cadogan completes the Western Australian connection and is also from Sir Charles Gairdner Hospital.

The 2nd edition of the *Toxicology Handbook* is highly recommended. It has been well thought out and

well structured with a practical focus. It is these characteristics that have seen the *Toxicology Handbook* rapidly becoming the pocket resource in toxicology for Australasian clinicians. The new 2nd edition with on line support is likely to cement that role. At \$69.95 it is affordable and good value, to the point that we would suggest a copy should be available in all Emergency Departments and acute care facilities. It is so good that it almost makes us want to go out and buy a white coat again, just so we can carry one around!

Reviewed by: Peter Aitken, MBBS, EMDM, MClinEd, FACEM, Associate Professor, School of Public Health, Tropical Medicine and Rehabilitation Sciences, James Cook University, and Senior Staff Specialist in Emergency Medicine, The Townsville Hospital, Townsville, Queensland, 4811, Australia. Peter A. Leggat, MD, PhD, DrPH, FAFPHM, FFPH RCP(UK), FACTM, FFTM ACTM, FFTM RCPSG, FACRRM: Professor and Deputy Head (Campus Head), School of Public Health, Tropical Medicine and Rehabilitation Sciences, James Cook University, Townsville, Queensland, 4811, Australia.

## References

 Nelson LS, Lewin NA, Howland MA, Hoffman RS, Goldfrank LR, Flomenbaum NE. Goldfrank's Toxicologic Emergencies. 9th edn. McGraw-Hill Medical, 2010.