

Administration of vaccines/changes of procedures

- Important changes to the dosage and administration of adrenaline in the management of anaphylaxis have been made, including administering adrenaline every 5 minutes until improvement occurs.
- The list of adverse reactions has increased and the time limit for reporting them has been removed.
- There are a number of changes to managing vaccine-associated side effects noted in this edition. Tepid sponging and routine administration of paracetamol prior to vaccination are no longer recommended.
- More information on 'cold-chain' (transportation and storage of vaccines) management has been included in this edition in the interests of maintaining vaccine efficacy.

Format of the handbook

The handbook continues to be a popular, user-friendly, desk reference for health care professionals. The flow of topics is logical, with vaccines now listed in alphabetical order. Information is well-indexed and there is good use of cross-referencing.

The size and layout of the book make it easy to access information. For instance, the recent changes to the vaccination schedule are summarised on the fold-out front cover. There is convenient reference to managing common vaccine-related adverse events as well as ready access to emergency measures on the fold-out back cover. The section on questions commonly asked by parents and vaccine providers presents information for practitioners in a useful manner. There is good use of tabular, diagrammatic and graphic detail to augment the text and clarify particular points, such as injection administration. The tabular guide to planning catch-up schedules is easier to use and more informative than in the previous edition. Detail on special risk groups is helpful and a new section on the immunisation needs of Aboriginal and Torres Strait Islanders has been included.

This book covers a wide range of issues likely to be encountered by practitioners and represents a practical guide to the safe provision of a wide variety of vaccines. It is available through the Immunisation Hotline (1 800 671 811) or you can view the book and the new schedule at <www.immunise.health.gov.au>.

**Andrea Bradford, Immunisation Coordinator
Brisbane Southside Public Health Unit, Qld.**

Therapeutic Guidelines: Antibiotic 2000-2001

Version 11, 2000

Therapeutic Guidelines Ltd, North Melbourne

Australia's own antibiotic guidelines

The 11th edition of *Therapeutic Guidelines: Antibiotic 2000-2001*, produced by Therapeutic Guidelines of Melbourne, Victoria, has been completed recently. The first edition of this publication was produced in 1978, with revision occurring approximately every 2 years. The publication is endorsed by a large number of national and state bodies, for example the Commonwealth Department of Health and Aged Care, Australian General Practice Accreditation Limited and the Australasian Society for Infectious Diseases, to mention but a few. With each new edition, feedback has been encouraged to ensure publications of high quality.

The guidelines are based on a review of the previous edition conducted by a writing group of individuals drawn from around Australia. Another group of experts is then asked to review the final draft. Both groups contain representatives from the fields of infectious diseases, microbiology, pharmacology, pharmacy, paediatrics, epidemiology, dentistry, sexual health, gastroenterology and general practice. The result of this extensive review process is a publication with increasing influence and impact within Australia and overseas. The guidelines are now regarded as a very reliable source of information on antibiotic prescribing and are frequently quoted as the definitive opinion in resolving antibiotic prescribing controversies and dilemmas.

The book grows larger with each edition but is still intended as a pocket-sized manual. Many other countries produce their own similar guidelines. However, unlike the American *Samford Guide*, the Australian version does not require a magnifying glass or strong lenses to enable it to be read!

The guidelines cover the principles of antibiotic use, provide a brief description of individual antimicrobial agents and have 18 chapters based on systems (e.g. gastrointestinal) or individual organisms (e.g. HIV). This is followed by 11 appendices covering a range of topics including drug reactions and interactions, antimicrobial resistance, intravenous administration and monitoring of serum drug levels.

The chapter on the principles of antimicrobial use is full of valuable, basic information, which should be mandatory

reading for all health professionals. Considerations for antibiotic use in all clinical scenarios include a review of whether a drug is indicated, what factors influence the choice of drug (be it prophylaxis, empirical or a directed therapy), what route to use and for how long. Guidelines on the use of combination drugs, antibiotic restriction policies and the differences between hospital and community antibiotic use are provided. There is a brief discussion on the pros and cons of home intravenous therapy.

Updates

In this latest edition, there are updated protocols on the management of endocarditis, central nervous system, gastrointestinal and genitourinary tract infections. The increasing problem of pneumococcal resistance is reflected in both empiric and directed therapeutic regimens for meningitis. The emerging problem of vancomycin-resistant enterococcus (VRE) has impacted on the recommendations for treatment of *Clostridium difficile colitis*. While metronidazole remains the drug of choice for this condition, the recommendation for vancomycin has been downgraded to use in severe, unresponsive cases only.

The chapter on HIV infection has been updated, although it is recognised that prescribing in this area has become more complex in recent years, requiring expertise and experience. The basic principles of antiretroviral therapy and the indications for changing therapy are nevertheless presented in a practical and simple way. Management of the more common opportunistic infections is simplified in a tabular form.

There is little change in the management of intra-abdominal, mycobacterial and oral and dental infections. The chapter on malaria, however, helps to demystify a condition which is a frequent source of both anxiety and controversy.

Prophylaxis

There are two chapters devoted to prophylaxis; medical and surgical. The medical chapter focuses mostly on endocarditis, however, there is a section on post-needlestick injury prophylaxis which can act as a useful basis for development of policies in this area. The chapter on surgical prophylaxis spells out clearly the basic principles of when, how and for how long to use antibiotic prophylaxis. This is followed by sections and specific recommendations in the major surgical areas, such as orthopaedics.

Respiratory tract infection

The largest area of antibiotic use in general practice is in the treatment of respiratory tract infections – particularly of the upper tract. Much of this is inappropriate as viruses cause the majority of such infections. In previous editions, the focus has been to just give antibiotic regimens for those bacterial conditions for which efficacy has been demonstrated. Rarely was advice given on non-antimicrobial therapies. In the new edition, it has been recognised that it is helpful to give the prescriber strategies to deal with the patient presenting with infections such as the common cold or rhinosinusitis. The recommendations are based on Cochrane reviews and a web site address is given to access self-care information that can be given to the patient. More detail on symptoms and signs that indicate bacterial rather than viral infection for sore throat and sinusitis have been given, again to reduce the use of antibiotics when infection is viral.

There has been much worldwide debate on the benefit of using antibiotics in children with otitis media. Some countries such as the Netherlands do not routinely give antibiotics. Clinical trials show that the benefit of antibiotics is minimal. Although antibiotic regimens are given, the advice is to treat symptomatically at first but with the provision of a patient education sheet (web site provided) and perhaps the use of a 'delayed' prescription.

The new neuraminidase inhibitor for the treatment of influenza has been included but only for treatment during a recognised epidemic and only if commenced early in the course of infection.

The chapter on lower respiratory tract infections has had minor changes. A table of antibiotics for empirical therapy of community acquired pneumonia has been included. Details of the regimens are in the text. It is notable that the oral dose of amoxycillin for mild to moderate pneumonia has been increased to 1 gram 8 hourly in recognition of the increasing incidence of drug resistant pneumococci. For severe pneumonia, the preferred regimen given is the combination of benzyl penicillin, gentamicin and erythromycin. This is not in accord with the recommendations made by other bodies such as the Infectious Diseases Society of America and the American Thoracic Society. The basis for the recommendation is two-fold. Firstly, there is a desire to reduce the selective pressure of third generation cephalosporins on gram negative organisms and, more particularly, for the selection of VRE. Secondly, there is pharmacodynamic data that supports the efficacy of aminoglycosides in the treatment of pneumonia.

Septicaemia and generalised infection

This chapter has been separated into two chapters: severe sepsis, bacteraemia and fungaemia; and systemic infections. The former has been updated with the current definition for severe sepsis. The empirical therapy section has been rearranged, with paediatric recommendations made on the basis of age and whether the presence of meningitis has been excluded. On this basis, the recommended regimens have also been changed slightly. New sections on staphylococcal toxic shock, *Yersinia enterocolitica* bacteraemia and fungaemia due to candida species have been added. The new chapter on systemic infections provides information on organisms, listing them alphabetically. The therapeutic regimens have not changed substantially.

Skin, muscle and bone infection

This chapter has been substantially reorganised with only minor changes to the antibiotic regimens. The doses of cephalothin (2g 6 hourly) and cefazolin (1g 8 hourly for staphylococcal infections and 2g 8 hourly for gram-negatives) have been standardised. Resistance associated with the use of antibiotics to treat acne has been addressed with advice on minimising selective pressure. Bites and clenched fist injuries have been reclassified in a more meaningful manner into low risk, high risk and established infection (with definitions for each category). Intravenous treatment regimens have been provided for the treatment of cellulitis and osteomyelitis

through a home-based programme. There have been some changes also to the regimens for diabetic foot infections and compound fractures. The previous section on muscular, skeletal and soft tissue trauma, crush injuries and stab wounds has been revised into post-surgical and post-traumatic wound infections with appropriate antibiotic regimens.

There are two new appendices. Firstly, there is a new section listing drug interactions involving antimicrobial agents. This is a very useful supplement to the sections on adverse reactions to antimicrobials and their potential for harm in pregnancy. Secondly, there is a new appendix on potential biological warfare agents. This is a recent area of interest but one that is likely to increase in depth and significance.

The 11th edition of *Therapeutic Guidelines: Antibiotic 2000-2001* has now been released. It is likely to be used and quoted at least as widely as its predecessors and is an important book on the increasingly complex topic of antibiotic prescribing.

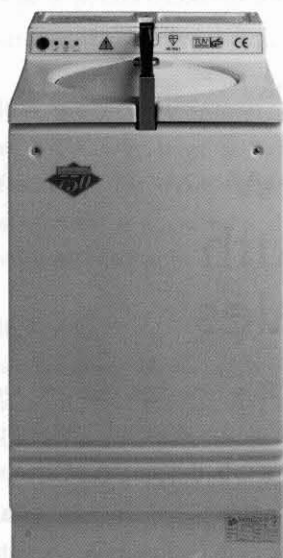
Joseph G McCormack

**Associate Professor of Medicine, University of Queensland
Director of Infectious Diseases, Mater Misericordiae
Hospitals, Queensland (corresponding author)**

**Keryn Christiansen, Clinical Microbiologist
Royal Perth Hospital, Western Australia**

Vernacare

The time machine has arrived!



- SPEEDY DISPOSAL OF HUMAN WASTE
- UP TO 4 PRODUCTS DISPOSED OF IN ONE CYCLE
- BREAKS THE CHAIN OF CROSS-INFECTION
- ELIMINATES MANUAL CLEANING OF BED PANS
- EXTENSIVE RANGE OF SINGLE USE RECYCLED PAPER PRODUCTS AVAILABLE



**For more information or to arrange a trial installation
contact Vernon-Carus on: 1300 786 225.**