

Essentials of Mechanical Ventilation, 2nd edition. Dean R Hess PhD RRT and Robert M Kacmarek PhD RRT. New York: McGraw Hill. 2002. Hard cover, illustrated, 382 pages, \$49.95

Essentials of Mechanical Ventilation is a textbook written by 2 experts on mechanical ventilation, and it covers all aspects of mechanical ventilation for adult patients. The book has 4 parts. The first part describes the principles of mechanical ventilation and basic physiology, traditional and new ventilation modes, key aspects of setting the ventilator, and the roles of the components of the ventilator circuit. Moreover, it gives clinically useful information on how to set the ventilator and weaning techniques.

The (extensive) second part of the book discusses how to ventilate patients suffering from various diseases and conditions, and in various clinical situations. Each chapter begins with a succinct description of the pathophysiology of a particular condition and then describes how to set the mechanical ventilation according to several goals. This section discusses how to mechanically ventilate patients who have primarily respiratory conditions (eg, acute respiratory distress syndrome, asthma, or chronic pulmonary disease) and patients whose conditions are not primarily pulmonary (eg, chest trauma, cardiac edema, or head injury).

The book's third part discusses everything essential to monitoring respiratory variables, including gas exchange, oxygenation, ventilation, and both the basic and more complex aspects of pulmonary mechanics.

In the book's final part the authors discuss issues such as airway management, positioning, miscellaneous pharmacology, and ventilatory techniques.

The book's index is useful, its chapters are well organized, and the writing is clear and readable.

Essentials of Mechanical Ventilation is addressed to respiratory therapists and physicians, including intensivists, anesthesiologists, physicians-in-training, and any other practitioners who make mechanical ventilation decisions at the bedside. Nurses should also consider this book fundamental, because it contains important information on

monitoring, airway management, aerosol medications, and chest tube management.

Each chapter begins with a description of its objectives and ends with an excellent section of "Points to Remember," which provides a checklist-format summary of the important clinical knowledge and problem-solving skills. The figures and tables are appropriate and clearly explained. The illustrations of common wave tracings (eg, airflow, tidal volume, and airway and esophageal pressures) deserve special mention for their clarity and quality. References are not quoted in the text, but the most relevant references are listed at the end of each chapter.

In summary, **Essentials of Mechanical Ventilation** provides a nice overview of common problems with patients receiving mechanical ventilation. I congratulate the authors for their clear and concise descriptions that will help any practitioner involved in providing respiratory care and utilizing its associated technology. The book should be considered one of the primary reference manuals in pulmonary critical care.

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Basic Clinical Lab Competencies for Respiratory Care: An Integrated Approach, 4th edition. Gary C White MEd RRT RPFT. Clifton Park, New York: Delmar Learning. 2003. Soft cover, illustrated, 705 pages, \$54.95.

Basic Clinical Lab Competencies for Respiratory Care is a 705-page, soft-cover text intended for the respiratory therapy (RT) student. The type is clear and easy to read and typographical errors are rare. This text covers a wide array of procedures and is appropriate for beginning and advanced RT students. It includes clinical competencies for modalities as simple as hand-washing and as complicated as intraaortic balloon pump.

I have used previous editions of this text and appreciate the ease with which it lends itself to arranging laboratory activities while serving as a source for didactic presenta-

tions. Class after class, this has been a text that students consistently utilize and from which they actually complete their assigned reading.

Although this is primarily intended as a textbook for RT students I think it would also serve as a helpful resource for respiratory departments. The book's proficiency objectives and performance evaluations could be very helpful for assessing and documenting staff training and competency.

Basic Clinical Competencies for Respiratory Care is nicely organized. This edition is in 4 sections ("Patient Assessment," "Therapeutics," "Emergency Management," and "Ventilation") to reflect the content matrix of the National Board for Respiratory Care. Each section is divided into chapters and lists the topics and procedures in each chapter. This is followed by a list of the book's performance evaluations.

New chapters have been added to this edition—on bronchial hygiene, chest tubes, documentation, noninvasive positive-pressure ventilation, radiologic assessment, and waveform analysis.

Every chapter begins with an introduction, a presentation of key terms used in the chapter, theory objectives, and the appropriate American Association for Respiratory Care clinical practice guideline. At the end of each chapter are practice laboratory activities, self-evaluation post-tests, and performance evaluation sheets (commonly referred to by students as "check-off sheets"). Students may find these post-tests helpful in preparing for course examinations. The performance evaluation sheets present each procedure in a concise, step-by-step manner and includes areas for scoring student performance, by peers, lab instructors, and in the clinical site. These evaluations make it easy for students and instructors to monitor progress.

The book includes an appendix with the answers to the self-evaluation post-tests, a glossary, and a thorough index. Therapies in the bronchial hygiene section have been updated to include "The Vest" (high-frequency chest-wall oscillation device) and Flutter valve therapy. There was no mention of the insufflator-exsufflator device, a