



ESSENTIALS OF
*Athletic
Training*

Fourth Edition

Daniel D. Arnheim
William E. Prentice

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Training*

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Preface

The majority of students who take courses dealing with prevention and management of injuries that typically occur in an athletic population have little or no intention of pursuing athletic training as a career. However, it is also true that a large percentage of those students who are taking these courses are doing so because they do intend to pursue careers in coaching, fitness, physical education, or other areas related to exercise and sport science. For these individuals, some knowledge and understanding of the many aspects of health care for both recreational and competitive athletes is “essential” for them to effectively perform the associated responsibilities of their job.

Other students who are personally into fitness or training and conditioning may be interested in taking a course that will provide them with guidelines and recommendations for preventing injuries; or they want to recognize what an injury is should one occur and learn at least a little about how to correctly manage it. *Consequently, the fourth edition of Essentials of Athletic Training is written for these students rather than only athletic trainers. Essentials of Athletic Training* has been designed to provide basic information on a variety of topics, all of which relate in one way or another to health care for the athlete.

Essentials of Athletic Training was created from the foundations established by another well-recognized textbook, *Principles of Athletic Training*, currently in its ninth edition. Whereas *Principles of Athletic Training* serves as a major text for professional athletic trainers and those individuals interested in sports medicine, *Essentials of Athletic Training* is written at a level more appropriate for the coach, fitness professional, or physical educator. It provides guidance, suggestions, and recommendations for proper athletic health care when an athletic trainer or physician are not available.

ORGANIZATION AND COVERAGE

This edition of *Essentials of Athletic Training* provides the reader with the most current information possible on the subject of prevention and basic care of sports injuries. The general philosophy of the text is that adverse effects of physical activity arising from participation in sport should be prevented to the greatest extent possible. However, the nature of participation in physical activity dictates that sooner or later injury may occur. In these situations, providing immediate and correct care can minimize the seriousness of an injury.

Overall, this text is designed to take the beginning student from general to more specific concepts. Each chapter focuses on promoting an understanding of the prevention and care of athletic injuries.

Essentials of Athletic Training is divided into three parts: Organizing and

Establishing an Effective Athletic Health Care System; Techniques for Preventing and Minimizing Sport-Related Injuries; and Recognition and Management of Specific Injuries and Conditions.

Part 1, Organizing and Establishing an Effective Athletic Health Care System, begins in Chapter 1 with a discussion of the roles and responsibilities of all the individuals on the sports medicine team who in some way impact on the delivery of health care to the athlete. Chapter 2 provides guidelines and recommendations for setting up a system that provides athletic health care in situations in which an athletic trainer is not available to oversee that process. For people in today's society in general, and in particular for anyone who is remotely related to providing athletic health care, the issues of legal responsibility and, perhaps more important, legal liability are of utmost concern. Chapter 3 discusses ways to minimize the chances of litigation and also to make certain that both the athlete and the coach are protected by appropriate insurance coverage. Chapter 4 emphasizes the importance of fitness in preventing injuries. Chapter 5 discusses the importance of eating a healthy diet and paying attention to sound nutritional practices.

Part 2, Techniques for Preventing and Minimizing Sport-Related Injuries, discusses a variety of topics that both individually and collectively can reduce the chances for injury to occur. Chapter 6 provides guidelines for selecting and using protective equipment. Chapter 7 explains in some detail how to assess the severity of an injury and then provides specific steps that should be taken to handle emergency situations. Chapter 8 provides guidelines and universal precautions that can help reduce the chances of spreading infectious diseases by preventing the transmission of bloodborne pathogens. Chapter 9 discusses the psychology of preparing to compete and proposes techniques for coping with injury when it does occur. Chapter 10 looks at ways to minimize the potentially negative threats of various environmental conditions on the health of the athlete. Chapter 11 discusses the more common taping techniques that can be used to prevent new injuries from occurring and old ones from becoming worse. Chapter 12 includes a brief discussion of the general techniques that may be used in rehabilitation following injury. Chapter 13 defines and classifies the various types of injuries that are most commonly seen in the physically active population.

Part 3, Recognition and Management of Specific Injuries and Conditions includes Chapters 14 through 22 which discuss injuries that occur in specific regions of the body: the foot; the ankle and lower leg; the knee; the hip, thigh, groin, and pelvis; the shoulder; the elbow, wrist, forearm, and hand; the spine; the thorax and abdomen; and the head and face. Injuries are discussed individually in terms of the most common causes, the recognizable signs, and a basic plan of care. Chapter 23 provides guidelines and suggestions for managing various illnesses and other health conditions that may effect athletes and their ability to play and compete. Chapter 24 provides special considerations for injuries that may occur in young athletes.

NEW TO THIS EDITION

- *Bloodborne pathogens*: A new Chapter 8 provides coverage of hepatitis B, HIV, and AIDS and the universal precautions necessary in the athletic environment. This chapter includes discussions of the symptoms and signs, prevention, and management of HBV and HIV as well as personal precautions, testing, and precautions from exposure.
- *Legal liability and insurance*: Chapter 3 provides greater detail about preventing litigation and about the different types of insurance available.
- *Young athletes*: Rather than being integrated as has been done in previous editions, this content is conveniently presented in one chapter, Chapter 24, which discusses young athletes from physical maturity to injury prevention.
- *Second-impact syndrome*: Chapter 22, The Head and Face, provides a timely discussion of this condition using the most current information available.
- *Critical thinking exercises*: Included in every chapter, these brief case studies correspond with the accompanying text and help students apply the content just learned. Solutions for each exercise are located at the end of the chapters.
- *Web sites*: Web sites are included at the end of appropriate chapters as an additional resource for students to obtain further information as well as to link to other web sites.
- *Pronunciation guides*: Selected margin definitions now provide pronunciation guides to reinforce learning of more difficult terms.
- *Bulleted chapter summaries*: New with this edition, chapter summaries are now bulleted to help reinforce content and to aid in test preparation.

PEDAGOGICAL FEATURES

A number of teaching devices are included in this text:

- *Chapter objectives*: Objectives are presented at the beginning of each chapter to reinforce learning goals.
- *Focus boxes*: Important information is highlighted to provide additional content that supplements the main text.
- *Margin information*: Key concepts, selected definitions, helpful training tips, and illustrations are placed in margins throughout the text for added emphasis and ease of reading and studying.
- *Photographs and line drawings*: These crucial tools are presented to facilitate the student's comprehension.
- *Color throughout the text*: A second color appears throughout the text to enhance the overall appearance and accentuate and clarify illustrations.

- *Chapter summaries:* Chapter content is summarized and bulleted to reinforce key concepts and aid in test preparation.
- *Review questions and class activities:* A list of questions and suggested class activities follows each chapter to offer review and application of the concepts learned.
- *References:* All chapters have a bibliography of pertinent references that includes the most complete and up-to-date resources available.
- *Annotated bibliography:* For students and instructors who want to expand on the information provided in each chapter, relevant and timely articles, books, and topics from the current literature have been annotated to provide additional resources.
- *Glossary:* A comprehensive list of key terms and their definitions are presented at the end of the text to reinforce information in one convenient location.
- *Appendices:* For those students interested in learning more about athletic training, Appendices A through C provide information about the profession, about certification, and about employment settings in the athletic training field. Appendix D contains helpful charts for metric and celsius conversions.

ANCILLARIES

Instructor's Manual and Test Bank

Developed for the fourth edition, the *Instructor's Manual and Test Bank* was prepared by Meredith Busby, M.A., A.T.C. Practical features include the following:

- Brief chapter overviews
- Learning objectives
- Key terminology
- Discussion questions
- Class activities
- Worksheets
- Worksheet answer keys
- Test bank
- Appendix of additional resources
- Twenty-four transparency masters
- Perforated format, ready for immediate use

Computerized Test Bank

A computerized version of the instructor's manual test bank for both IBM and Macintosh is available to qualified adopters. This software provides user-friendly aids and enables the instructor to select, edit, add, or delete questions as well as construct and print tests and answer keys.

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Special thanks are extended to Michelle Turenne, with whom we have enjoyed a long-standing relationship as our developmental editor on this and several other projects. She has provided invaluable guidance once again in the preparation of this fourth edition of *Essentials of Athletic Training*.

Our editor, Vicki Malinee, continues to be the “rock” that keeps us focused for all our projects. We both have benefited tremendously from our years of working with her. We look forward to continuing our rewarding relationship with her for many years to come.

Meredith Busby from the University of North Carolina has been responsible for preparing the *Instructor's Manual and Test Bank* that accompanies this text as well as for providing web site resources in this edition. Her efforts have provided a much-needed educational resource for individuals teaching a course in athletic injuries, and we certainly appreciate the manner in which she has completed her part of this project.

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Daniel D. Arnheim
William E. Prentice

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