

Accidental Injury

Biomechanics and Prevention

Alan M. Nahum
Editors

John W. Melvin

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Biomechanics and Prevention

With 288 Figures



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To Julie, David, Bob, and Victoria, whose love and support make all things possible.

Preface

Writing on accidental injury often seems to occur from one of two perspectives. One perspective is that of those involved in aspects of injury diagnosis and treatment and the other is that of those in the engineering and biologic sciences who discuss mechanical principles and simulations.

From our point of view, significant information problems exist at the interface: Persons in the business of diagnosis and treatment do not know how to access, use, and evaluate theoretical information that does not have obvious practical applications; persons on the theoretical side do not have enough real-life field data with which to identify problems or to evaluate solutions.

The ideal system provides a constant two-way flow of data that permits continuous problem identification and course correction.

This book attempts to provide a state-of-the-art look at the applied biomechanics of accidental-injury causation and prevention. The authors are recognized authorities in their specialized fields.

It is hoped that this book will stimulate more applied research in the field of accidental-injury causation and prevention.

Alan M. Nahum
John W. Melvin

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