

**FOOTBALL FATALITIES AND  
CATASTROPHIC INJURIES,  
1931–2016**



# FOOTBALL FATALITIES AND CATASTROPHIC INJURIES, 1931–2016

SECOND EDITION

**Frederick O. Mueller, Ph.D.**

PROFESSOR EMERITUS OF EXERCISE AND SPORT SCIENCE,  
UNIVERSITY OF NORTH CAROLINA—CHAPEL HILL

**Robert C. Cantu, M.D.**

EMERSON HOSPITAL—CONCORD, MASSACHUSETTS  
BOSTON UNIVERSITY CLINICAL PROFESSOR OF NEUROSURGERY



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*This book is dedicated to all of the football players who had a fatal or catastrophic injury during their playing days. It is also dedicated to the researchers who were responsible for the many changes in the game of football that made it a much safer sport for the participants.*

*A special thanks to the American Football Coaches Association, the National Federation of State High School Associations, and the National Collegiate Athletic Association for their help in making this book possible.*

### ***Special Dedication***

*This special dedication is to Dr. Herbert T. “Herb” Appenzeller who passed away January 8, 2018, at age 92. Herb was a native of Newark, New Jersey, and was a member of eight halls of fame including the National Association of Intercollegiate Athletics, National Association of Collegiate Directors of Athletics, the North Carolina Sports Hall of Fame, Guilford College Athletics Hall of Fame, and the Wake Forest University Hall of Fame. Herb was also a successful high school and college coach and spent most of his distinguished career as athletic director at Guilford College. Herb retired in 1993 but continued his career in sport management and sport law. He is the author or editor of at least 25 books and the author of a quarterly publication titled “From the Gym to the Jury.” Herb was a true scholar and his contributions to sports and athletics will never be matched. Herb was a great friend and will always be remembered for his numerous contributions to sports safety.*



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# Foreword

*Grant Teaff—Executive Director Emeritus,  
American Football Coaches Association*

The second edition of *Football Fatalities and Catastrophic Injuries, 1931–2016*, by Frederick O. Mueller, Ph.D., and Robert C. Cantu, M.D., not only updates the data of football fatalities and catastrophic injuries to the present but also includes data on a number of other sports played by both males and females at all levels of play—youth high school, college, and professional. These important updates are relevant not only to football coaches and administrators but also to participants, parents who have concerns about the future of their sons’ and daughters’ participation, spectators, and sport enthusiasts concerned about the future of sports.

Serious concerns related to sports safety arose in 1906 when the President of the United States, Theodore Roosevelt, determined that the game of American football needed “to be fixed” because, as the game was played at the turn of the century, catastrophic injuries were prevalent and there were few rules to govern the brutality of the sport. President Roosevelt asked coaches of the day to fix the sport or he would strongly consider banning the game of football. The coaches took the President’s challenge seriously and began to create rules of play and conduct. Later, eligibility rules and academic requirements would be added as the National Collegiate Athletic Association (NCAA) was formed to enforce the new rules and regulations for the game of football.

In 1922 the American Football Coaches Association (AFCA) was formed. A code of ethics for coaching was laid out and the AFCA determined to maintain the highest standards in football and the coaching profession. It was also determined at that time that one of the most important matters pertaining

to football and coaching was the health and well-being of the student athlete. Data collection of catastrophic injuries (death and disability) was initiated by the AFCA in 1931 and has continued ever since. The results have seen football fatalities reach a high of 35 in 1968 and fall to zero in 1990 and have seen a major reduction of disability injuries. The research and data collection of catastrophic injuries is more important now than ever with more young men (and in some cases women) participating from youth through the professional ranks.

While football continues to be a major area when discussing safety, the second edition of this book raises concerns that affect all sports for males and females at all levels of play. Dr. Cantu has expanded his chapter on brain and spine injuries in football and also written new chapters on concussion and chronic traumatic encephalopathy (CTE). The chapter on concussions highlights the increased number of concussions in all sports and all levels and the possible lasting effects of this injury. In many cases females participating in the same or similar sport as males (soccer or softball/baseball) have a higher number of concussions. CTE has been in the news for many years while associated with professional athletes participating in football and ice hockey, as well as a number of other professional contact sports. There has also been discussion and CTE cases found in lower levels—high school and college.

In addition to the new chapters mentioned above, there is a completion of Chapter 8 (2001–2008) on football fatalities and catastrophic injuries in football from 2001–2010 and a new chapter on fatalities and catastrophic injury data from 2011–2016.

Non-traumatic injuries have been a concern in all sports, and the football data show an increase in heart-related and heat stroke deaths. This new chapter includes an update on the data and recommendations for prevention.

Two additional chapters that have been added are one on the history and future of the National Operating Committee on Standards in Athletic Equipment (NOCSAE) and the second on the history and changes in the National Center for Catastrophic Sport Injury Research (NCCSIR).

The final chapter offers an update on risk management in sport. Appropriate chapters include injury prevention measures.

This is a book that should be read by every administrator, coach, participant, parent, and sport spectator. I have worked with Drs. Mueller and Cantu for many years and I have observed how they have meticulously worked to gather catastrophic data that has added to the desired health and well-being of athletes at all levels of sport. It shows how data collection has played an important role in the safety of athletes through changes in protective equipment, rule changes, coaching techniques, and medical advances.