

The cover features several stylized, light green leaf motifs scattered across a pale yellow background. Each motif consists of a short stem with two leaves pointing in opposite directions.

# **INJURY PREVENTION FOR YOUNG CHILDREN**

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**A Research Guide**

**Bonnie L. Walker**

 ***Greenwood***  
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# Injury Prevention for Young Children

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# Injury Prevention for Young Children

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A Research Guide

Compiled by  
**BONNIE L. WALKER**

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**In order to keep this title in print and available to the academic community, this edition was produced using digital reprint technology in a relatively short print run. This would not have been attainable using traditional methods. Although the cover has been changed from its original appearance, the text remains the same and all materials and methods used still conform to the highest book-making standards.**

*To my grandchildren,  
Derek Mitchell Walker Cope and Amber Nicole Walker Cope*

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# Preface

The purpose of this literature review is to provide information that could be used to develop an injury prevention training program curriculum for people who care for young children ages 0 to 4 in child care facilities as well as in the community.

Unintentional injury is one of the leading causes of death to young children. The most common types of injuries to children under the age of 5 are motor vehicle crashes, drowning, fires and burns, falls, poisoning, and suffocation. Other types of health and safety issues that affect young children are child abuse, infectious diseases, and food poisoning. Understanding each of these problems, their causes, and model prevention techniques can lead child care providers and policymakers to adopt practices that will reduce needless deaths and injuries.

The injury areas that are included in this book were identified as a result of a literature search and through discussions with experts in child care and injury prevention. The process of locating the most important and most current research was circular and involved literature searches, discussions of findings, more literature searches, and more discussions.

Many references were located from searches of the Expanded Academic Index, ERIC, Medline, and Articles1st. Carol Kennedy from the National Center for Education in Maternal and Child Health and Susan G. Brink, President of HealthMark Associates, provided assistance in locating many of the materials used in this text. Bonnie Walker & Associates, Inc. used its own extensive reference library to locate information about burns and scalds. The National Fire Protection Association provided many items related to that topic from its research collection.

References selected for each section were those which provided information about prevalence, risk factors, specific hazards, and prevention techniques related to that injury area. The articles that were included provided information useful to people who care for young children, who conduct research to better understand how to prevent injuries in young children, or who supervise or train people who care for the young children either in child care or home settings.

The first chapter of this book includes references which address injury prevention in general or more than one injury class. Also included in Chapter 1 are curriculum guides and other training materials addressing more than one injury class. The remaining chapters are arranged alphabetically by injury class. A summary of the findings related to each injury prevention topic is presented at the beginning of each chapter. Resource materials such as videos or curriculum guides related to specific topics are included in the related chapters.

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# Injury Prevention for Young Children

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## General Injury Prevention

Unintentional injuries account for a large number of fatalities to children ages 0 to 4 each year. Injury prevention for young children has been the focus of many studies and training programs. In some cases researchers focus on a specific injury class. In others the researchers examine many types of injuries at once. Child abuse, a problem area which includes many other types of injury, has also produced a great deal of interest for researchers. Chapter 1 lists books and articles about the prevalence of major kinds of injuries including incidence among young children, risk factors, prevention research, and the cost of injuries. These publications address injuries across types rather than a single class of injuries.

- 001 Allshouse, Michael J., Rouse, Thomas, & Eichelberger, Martin R. (June, 1993). Childhood injury: A current perspective. *Pediatric Emergency Care*, 9(3), 159-164.

The authors discuss trends in childhood injury to highlight the need for several types of prevention efforts. Because the majority of childhood injuries are traffic-, fall-, or burn-related, the authors suggest that new standards be set to prevent the known causes of such injuries. Well-known strategies such as wearing bicycle helmets, using safety belts, securing firearms at home, and controlling water heater temperature will also help prevent these major causes of injury. Because childhood injury is different both in type of injury and response to injury than adult injury, the

## 2 *Injury Prevention for Young Children: A Research Guide*

authors suggest that the study of childhood injury patterns will highlight the areas most in need of prevention intervention.

- 002 Alperstein, Garth, Rappaport, Claire, & Flanigan, Joan M. (September, 1988). Health problems of homeless children in New York City. *American Journal of Public Health, 78*(9), 1232-1233.

The authors studied outpatient medical records for 265 homeless children ages 5 and under who attended a New York City hospital. These records were compared to children ages 5 and under attending the same hospital who lived at home. Of the homeless subjects, 138 (52%) were black, 93 (35%) Hispanic, 21 (8%) white, 3 (1%) other, and 10 (4%) unknown. A majority (64%) of the children were ages 1 to 4. The proportions of homeless children with higher blood lead levels, reports of child abuse and neglect, hospital admissions, and delayed immunization were higher than those in the comparison groups. The authors suggest that some of the health problems experienced by homeless children may be prevented by adequate health care, but acknowledge that other problems may only be remedied by broader political, social, and economic changes.

- 003 Alwash, R., & McCarthy, M. (June, 1988). Measuring severity of injuries to children from home accidents. *Archives of Disease in Childhood, 63*(6), 635-638.

This British study examined the severity of home injuries to 402 children ages 5 and under in a London hospital. Lacerations, burns and scalds, poisoning, fractures, head injuries, and foreign body injuries were classified as either mild, moderate, or severe based on a scale developed by the authors. Burns and scalds and poisoning caused more severe injuries than other accidents. Demographic data showed that children from lower socioeconomic backgrounds had more accidents, and that the injuries caused by these accidents were more serious. Ethnic background appeared to have no impact on the severity of injuries studied. The authors suggest that a study of injury severity based on a similar scale would help pinpoint prevention efforts at the groups most likely to suffer serious injuries, and at the types of accidents that cause more severe injuries.

- 004 American Public Health Association, & the American Academy of Pediatrics. (1992). *Caring for our children: National health and*

*safety performance standards: Guidelines for out-of-home child care programs.* Washington, DC: Authors.

The American Public Health Association and the American Academy of Pediatrics developed this book to provide standards of child care safety and health for child care programs in the United States. The standards cover staffing, activity and health programs, nutrition and food services, facilities, infectious diseases, children with special needs, and administration. The authors make recommendations for child care licensing and community action. The book also includes several appendices and a glossary of terms used in the book.

005 *American Red Cross child care course.* (1992). Washington, DC: American Red Cross.

This program was developed by the American Red Cross to train child care workers. There are millions of these caregivers in the United States, but most have little or no training. The course includes seven units which are divided into two coursebooks. The coursebook titled Health and Safety Units includes chapters on the prevention of childhood injuries, infant and child first aid, preventing infectious diseases, and caring for ill children, as well as the American Red Cross First Aid Guides. The coursebook titled Child Development Units includes chapters on learning about child development, communicating with children and parents, and recognizing and reporting child abuse. Each chapter includes sample forms, checklists, and resource pages as appendices.

006 *American Red Cross, & Handal, Kathleen A. (1992). The American Red Cross first aid and safety handbook.* Boston, MA: Little, Brown and Company.

This book discusses basic emergency procedures, first aid, and injury prevention techniques. Emergency situations are described with detailed instructions for giving emergency care and contacting appropriate medical help. The first aid section describes 30 types of injuries, giving the most common signs and symptoms as well as first aid techniques to help stabilize the condition until medical help is provided. The last section discusses personal and family safety, giving lists of ways that the reader can eliminate home, fire, disaster, outdoor, sports, water, and motor vehicle safety hazards. The book also includes a list of resource organizations and available American Red Cross first aid courses.

#### 4 *Injury Prevention for Young Children: A Research Guide*

- 007 Aronson, Susan S. (1991). *Health & safety in child care*. New York: HarperCollins Publishers, Inc.

This book is intended as a textbook on the management of health and safety in child care settings for child care professionals and early childhood education students. Topics include promoting general health; nutrition; adult health; the child care facility; riding, walking, and playground safety; indoor safety and preparation for emergencies; infectious diseases; illness; child abuse; and implementing regulations and standards in child care facilities. Appendices include resource materials and sample forms for child care professionals.

- 008 Aronson, Susan, & Smith, Herberta. (1993). *Model child care health policies*. Washington, DC: National Association for the Education of Young Children.

This book contains sample policies for child care facilities. The policies have been designed to comply with standards from the American Public Health Association and the American Academy of Pediatrics. The material in the book is intended to be modified for compliance with individual facility and state regulations, and should be reviewed annually. Several appendices also provide information on health assessment, illness symptoms and other resources.

- 009 Baker, Susan P. (1975). Determinants of injury and opportunities for intervention. *American Journal of Epidemiology*, 101(2), 98-102.

This article explores the reasons why some groups of people experience more injuries than others. For example, elderly people have a high rate of pedestrian fatalities. This phenomena is not necessarily a direct result of age, but may result from age-associated decreases in an elderly person's ability to perceive moving cars or respond quickly and appropriately in an emergency. Interventions should be directed at the risk factors of the group of people, rather than at the people themselves. The article discusses four categories of countermeasures: modification of the environment; perceptual aids, training and education; strengthening the individual who would otherwise be injured; and emergency response systems and medical treatment. Modification of the environment has the greatest potential as an effective intervention because it does not rely on human cooperation or behavior to prevent injuries.

- 010 Baker, Susan P., O'Neill, Brian, Ginsburg, Marvin J., & Li, Guohua. (1992). *The injury fact book*. New York: Oxford University Press.

This book gives an overview of injury and injury mortality in the United States and discusses the intentional or unintentional nature of these injuries. Categories of injuries include suicide, homicide, sports and recreation injuries, vehicle-related injuries, occupational injuries, falls, firearm-related injuries, fires and burns, drowning, asphyxiation by choking and suffocation, and poisoning. Each category is discussed according to the place of injury, the victims of the injury by age, gender, race, and per capita income, geographic differences, historical trends, and preventive measures.

- 011 Baker, Susan P., & Waller, Anna E. (1989). *Childhood injury: State-by-state mortality facts*. Baltimore, MD: The Johns Hopkins Injury Prevention Center.

The authors compiled child injury mortality data for 1980 to 1985 to determine the numbers of deaths in each state and in the United States as a whole. These data are evaluated by age, race, and gender for 23 common causes of childhood injury. These causes include motor vehicles, air transport, poisoning, house fires, drowning, aspiration, suffocation, firearms, electric current, farm machinery, medicine or surgery, suicide, homicide, and unknown intent. The authors suggest that state-specific data, such as the data in this book, will help state health agencies target the specific injury prevention needs in their area.

- 012 Bassoff, Betty Z., & The San Diego County Consortium for The California Child Care Health Project. (1991). *Injury prevention & response: A manual for child care providers*. San Diego, CA: San Diego State University.

This book is a curriculum guide designed to provide instructors of day care providers with materials to teach a 3-hour course on injury prevention. The course begins with a description of child care injuries, how injuries happen, and basic injury prevention management, as well as the behavioral and developmental aspects of injury prevention in child care settings. The course material includes a wide range of injury topics, including falls, interpersonal violence, burns and fires, heat exhaustion and heatstroke, choking and suffocation, poisoning, child abuse, traffic and vehicle occupant safety, and drowning. Each topic is discussed with a definition of the problem, a list of