

Proceedings of a multidisciplinary conference

Reducing childhood pedestrian injuries

Edited by R A Schieber, M E Vegega

Dedicated to children walking, everywhere

Few news stories are as disturbing as that of a child killed while crossing the street. The photograph below (see fig 1), winner of the 1959 Pulitzer Prize, is still unsettling. Why did it happen? What could have prevented it? And why is it still happening, more than 40 years later?

It takes only a moment for lives to change. The young child in this photograph, trying to cross a busy street, was struck by a garbage truck as it rounded the corner. We can easily imagine the tremendous imbalance of momentum here—a truck weighing tons, striking a child weighing just pounds. No protective device, no safety gear could have eliminated that disparity.

By design, our society depends heavily on motor vehicle transportation. It sustains our economy and influences our

culture profoundly. And yet, every day, each of us is a pedestrian who needs and deserves to share the road safely with motorists.

The right to walk safely seems fundamental, especially for children, yet each year for more than a decade, more than 700 children have died from injuries sustained while walking, over 500 of these in traffic. Although the fatality rate has declined somewhat for more than a decade, it could be attributable to improvements in pre-hospital and emergency medical care or to a decline in walking as a mode of transportation. As we encourage individuals to get out and walk to combat obesity and other health conditions, we must make sure that they have a safe environment in which to do so.

Many professionals and advocates have worked for years to reduce child

pedestrian deaths in our country. Experts in motor vehicle safety, public health, city planning, school safety, child development, and engineering have wrestled with the problem, each approaching it from his or her specialty's point of view. But these approaches are limited because the entire solution does not rest within a single specialty. Child pedestrian safety is one of the most complex societal problems we face in injury prevention today.

Effective solutions to the child pedestrian safety problem must be multifaceted and arise from a collaboration among experts from diverse fields. This need was the origin of the Panel to Prevent Pedestrian Injuries, an interdisciplinary conference held in September 1998 to focus on reducing childhood pedestrian injuries in the United States. Three organizations came together to spearhead the effort and support the conference—the Centers for Disease Control and Prevention, working to protect the nation's health; the National Highway Traffic Safety Administration, addressing road safety; and the National SAFE KIDS Campaign, advocating for the safety of our children. State-of-the-art position papers were commissioned on key topics in pediatric pedestrian injuries, including epidemiology, education, engineering, sociology, psychology, and research. These were the basis of discussion at the conference for the nearly 100 experts representing more than 25 professions from four high income nations (the United States, Canada, United Kingdom, and Australia). Conferees were charged with identifying key barriers to reduce pedestrian injuries and the appropriate next steps to overcome such barriers. This document summarizes their effort and puts forward the strategies and actions developed. Not all problems identified in the Executive Summary concluded with a recommendation. More than 100 recommendations arose from the conference, and it was necessary to be parsimonious in designing a workable set of recommendations.

This document is not intended to be a government plan of action, nor to provide recommendations to the United States government. Rather, these strategies are intended to be used by anyone interested in reducing pedestrian injuries among children, while encouraging them to explore their environment by walking. Although the conference was established to propose solutions for just the United States, they should be appropriate for other developed nations as well, after taking the special circumstances of each nation into account. We made no attempt to address possible pedestrian safety solutions for developing nations, since the traffic, environmental, educational, and administrative



Figure 1 Reproduced with permission (William Seaman/Minneapolis Star Tribune).

milieu may be so different from that of developed nations as to warrant very different strategies not considered here.

Having sought your understanding of these limitations, we now urge you to review these deliberations and the consequent strategies, consider them, and implement them. We sincerely hope this document will inspire you to dedicate

yourself to improving the safety of child pedestrians everywhere.

For a full hard copy of the either the Proceedings or the Recommendations, please see <http://www.cdc.gov/ncipc/pedestrian>

.....

Authors' affiliations

R A Schieber, US Department of Health and Human Services, Centers for Disease Control

and Prevention, National Center for Injury Prevention and Control

M E Vegega, US Department of Transportation, National Highway Traffic Safety Administration, Office of Traffic Injury Control Programs

Correspondence to: Dr Richard A Schieber, Division of Unintentional Injury Prevention, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, MSK-63, 4770 Buford Highway, NE, Atlanta, GA 30341, USA; rbs4@cdc.gov

Contributors

Dan Burden

Walkable Communities, Inc, High Springs, Florida
Engineering factors

Kathy Kaufer Christoffel, MD, MPH

Children's Memorial Hospital, Northwestern University School of Medicine, Chicago, Illinois
Individual factors

Michael Cynecki, MSCE

Street Transportation Department, Phoenix, Arizona
Engineering factors

David DiLillo, PhD

Department of Psychology, University of Nebraska-Lincoln, Lincoln, Nebraska
Individual factors

Jean Gearing, PhD, MPH

Atlanta, Georgia
Sociological factors

Andrea Gielen, ScD, ScM

Center for Injury Research and Policy, Johns Hopkins School of Public Health, Baltimore, Maryland
Educational factors

Jennie Kronenfeld, PhD

Arizona State University, School of Health Administration and Policy, Phoenix, Arizona
Sociological factors

Patrick J McMahon, MRP

Neighborhood Design Center, Baltimore, Maryland
Engineering factors

Lizette Peterson, PhD

Department of Psychological Sciences, University of Missouri-Columbia, Columbia, Missouri
Individual factors

Fred Rivara, MD, MPH

Harborview Injury Prevention & Research Center, University of Washington, Seattle, Washington
Research agenda, adopting a new approach

Ian Roberts, MD, PhD

Institute of Child Health, University of London, London, UK
Research agenda, adopting a new approach

Richard A Schieber, MD, MPH

Centers for Disease Control and Prevention, Atlanta, Georgia
Epidemiology, epilogue

Mark Stevenson, PhD

Injury Research Centre, University of Western Australia, Perth, Australia
Research agenda

James Thomson, PhD

Department of Psychology, University of Strathclyde, Glasgow, Scotland
Educational factors

Maria E Vegega, PhD

National Highway Traffic Safety Administration, Washington, DC
Epilogue

Charles V Zegeer, MS

University of North Carolina Highway Safety Research Center, Chapel Hill, North Carolina
Engineering factors