Tens of thousands die from brain injuries annually, with approximately half of all Traumatic Brain Injuries (TBI) being transportation-related. TBI is a critical and ever-evolving safety topic, with equally important components of injury prevention, consequences, and treatment. This comprehensive resource presents information beneficial to transportation industry professionals as well as those in the medical, law enforcement, and insurance professions.

This book is part of a 3-volume set that presents a comprehensive look at recent head injury research. Editor Jeffrey A. Pike has selected the most relevant technical papers spanning the past two decades as well as several older papers that provide an essential historical perspective. Each volume in the series also includes a table of references arranged by topic and a new chapter that provides background on anatomy, injury, and injury mechanism topics.

This volume, Volume 1, focuses on head impact injuries and features 13 technical papers. These publications are primarily related to head impact and the resulting injury to the outside of the head – the skin, the bones of the skull, and sensory organs.

Volume 2 features 13 technical papers that are primarily related to injuries to the brain, its surrounding membranes, and its blood supply.

Volume 3 includes 14 papers regarding testing and the application of protective strategies to various injury scenarios, such as passenger vehicles, sports, and blast injuries, or to a particular demographic group, such as children or seniors.

About the editor
Jeffrey A. Pike is president, Biomechanics Consulting, Inc., which provides research, education, and forensic biomechanics consulting services. His previous experience includes senior technical specialist, Ford Motor Company and adjunct professor, Wayne State University, Biomedical Engineering Department. He is a consultant to various agencies, including the Centers for Disease Control (CDC), National Academy of Sciences, NHTSA, and state and local governments. His current projects include consulting on a CDC/NIOSH contract to develop restraint systems for providers of in-ambulance care. Mr. Pike welcomes reader feedback and may be contacted at: jp@bciconsult.com.