Epidemiology of Alcohol-Related Accidents and the Grand Rapids Study

REFERENCE: Waller PF: Epidemiology of alcohol-related accidents and the Grand Rapids Study; *Forensic Sci Rev* 12:107–118; 2000.

ABSTRACT: Although it was evident from the early years of this century that alcohol was associated with motor vehicle injury, and although strict laws were enacted in both the U.S. and elsewhere imposing severe penalties for drunken driving, in the U.S. drinking and driving was so widespread that it was generally not viewed as a major offense. Severe penalties were rarely imposed, and the practice of reducing charges was commonplace. Objective data on the relationship between alcohol and crash involvement were not available. The Grand Rapids Study, first published in 1964, clearly documented for the first time the rapid acceleration of crash risk associated with increasing blood alcohol concentration. This study provided the basis for educating the public and enacting stricter laws governing drinking and driving, as well as the basis for much additional research. When the citizen action groups came into being, the solid knowledge foundation that had been established was translated into programs that have greatly reduced alcohol-related injury and death on the highway. In the last two decades unprecedented progress has been made in this regard, with the proportion of fatal crashes that are alcohol-related steadily decreasing in every age group. The Grand Rapids Study remains as a landmark contribution that continues to be used in developing and implementing programs to reduce drunken driving.

KEY WORDS: Alcohol, crashes, drunken driving, epidemiology, Grand Rapids Study, motor vehicle crashes.