



### **D9 An Evaluation of the Lethal Traffic Accidents in Crete During 1998-2004**

*Elena Kranioti, MD, Department of Forensic Pathology, University Hospital of Heraklion, Medical School University of Crete, Greece; Ersi Abaci Kalfoglou PhD and Munevver Acikkol PhD, Institute of Forensic Sciences Istanbul University 34303 Istanbul Turkey; and Manolis Michalodimitrakis MD, JD, Department of Forensic Pathology, University Hospital of Heraklion, Medical School University of Crete, Greece*

Drug use is considered to be one of the most important contributors to traffic accidents. It has been shown by numerous studies that blood alcohol levels exceeding 0.1 g per 100 ml increases the crash risk. It is also very well known that many drugs like cannabis, benzodiazepines, and opiate like drugs such as heroin, morphine, methadone, and amphetamines impair driving skills. While the basic effects of drugs on performance can be expected to be comparable in different nations, the drug related accident risk may vary due to different driving habits, structure and density of traffic and so on. Therefore, it seemed to be interesting to study the situation in Crete, knowing that the fatal traffic accidents in Greece are more than 18,000 per year placing the country in the first place within the European Union.

In this study, the authors collected the data from the of the fatal traffic accidents that occurred in Crete during 1998-2004. They were classified as to their number, number of deaths per accident, the seasonal and monthly distribution (since there are serious seasonal fluctuations in the number of inhabitants during winter and summer time), the time and the rate during the week, and the age distribution of the deaths.

The authors concluded that the maximum number is reached in summer and on Sundays, the highest value being in September. The age distribution showed a maximum between 21-30 years of age. The second part of the study was to correlate the values with the toxicological analysis outcome of the above-mentioned accidents. Alcohol, opiates, cannabinoids, and benzodiazepines were tested and compared with the parameters studied. The overall positive outcome was the observation of a general decrease in the fatal traffic accidents as compared to the last ten years

**Forensic Toxicology, Driving, Crash Risk**