

0433 **A NON-BIASED EVALUATION OF BLOOD ALCOHOL CONCENTRATIONS IN DRIVERS**

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Background Over the past decade the consumption of alcohol in Israel has been on the rise and the role of alcohol in driver-related injuries in Israel is unknown. Monitoring blood alcohol concentrations (BACs) among drivers is not routine and confounded by numerous methodological issues.

Methods A prospective study was conducted to examine the BAC of drivers admitted as trauma patients due to motor vehicle crashes. Data were collected for 22 months over a 3-year period (2006–2008). Non-identifiable patient numbers were assigned to each driver. Questionnaires regarding injury characteristics were completed by trauma room staff. Excess blood samples according to the assigned patient numbers were used to identify BAC.

Results Approximately 15% of injured drivers had a BAC \geq 0.05 g/dl (positive BAC). The majority of drivers were males under 30 years old. Drivers with a positive BAC had a higher prevalence of self accidents, rolling over, crashes at an intersection and disregard of seatbelt use.

Conclusions This is the first study to systematically quantify BAC among drivers in Israel by using untraceable results. We found a substantially high prevalence of positive BAC among hospitalised drivers. At-risk groups for alcohol-related driver crashes were identified. We recommend that this study be used as a basis for preventive and enforcement strategies for reducing alcohol-related driver crashes.