

majority of injuries and deaths are pedestrian injuries. Road traffic injuries are also a major cause of disability, thus a major economic and social issue.

Objectives: To explore the perceptions of risk due to road traffic among health care providers and the validity of utilizing health care workers as teachers of preventive behaviors and safety interventions.

Methods: A convenience sample survey of health care providers was conducted over a 6 week period of time in Addis Ababa, Ethiopia. The survey was translated into Amharic and back-translated into English. IRB approval was gained in both USA and Ethiopia.

Results: 90 respondents, 35.6% physicians, 56.6% in the nursing field, 7.8% others working in health care delivery. 45.9% work in Outpatient Department (Emergency Department equivalent). 64% do not use seatbelts ever, and the majority of those who use seatbelts do not usually do so. Most road users do not feel safe while using the road. Of the 35% of respondents who consider themselves safe road users, these persons are more likely to work in the OPD (OR: 2.5, $p < 0.04$). These persons who work in the OPD have a tendency (although not significant) not to be those persons who ever wear seatbelts (OR: 0.44, $p = 0.08$). There is no significant association between previous history of injury due to RTI and subsequent seatbelt use, nor significant association between seatbelt use and feeling of safety. Most respondents are able to contribute practical solutions for improved safety. **Conclusions:** The survey demonstrates that most Ethiopian road users do not feel safe, and also do not use safety precautions. The hypothesis that persons more exposed to acute injuries would use more safety precautions is not proven, and therefore further investigation or teaching is necessary before using the Outpatient Department setting as a means for education.

164 Left vs. Right Rollover Crashes: Frequency and Impact on Fatality

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Background: Rollover crashes account for a disproportionately large number of motor vehicle occupant injuries and fatalities. A retrospective study of single vehicle rollover crashes was conducted to examine whether there is a difference in frequency of rollover direction and the implications of rollover direction on occupant injury and fatality rates.

Methods: Data was collected and analyzed from the NASS CDS database of police reported tow-away crashes occurring between 1992 and 2002 in the United States. This data was limited to crashes with right or left initial rollover crashes. One subgroup of the sample was limited to single vehicle crashes with right or left initial rollover, in which both driver and front seat passenger were secured with lap-shoulder belts. Another subgroup was limited to single vehicle crashes with the driver as the only occupant. Frequency of initial rollover direction was examined as well as the risks of injury or death based on the initial direction of the rollover.

Results: Left rollover crashes (54.4%) occurred more often than right rollovers (45.6%, $p = 0.04$); however, right

rollover crashes showed a higher fatality rate of 55.3% while the left rollovers made up 44.7% of the fatalities. Additionally, in crashes with only a driver and a passenger as belted occupants, the left vs. right rollover frequencies were close to equal (49.5% vs. 50.5%), but if there was a death, it was more likely during a right rollover ($p = 0.01$). There were on average 1.58 passengers in the vehicle when it rolled to the left and 1.75 passengers when it rolled to the right ($p = 0.04$).

Conclusions: Vehicles are more likely to roll to the left than to the right in rollover crashes. A death is more likely to occur when the rollover direction is to the right. Having a driver and right front seat passenger seems to negate the difference in initial rollover direction, but front seat fatalities still tend to occur more commonly rolling towards the right.

165 Prevalence and Correlates of Self-reported Safety Belt non-use Among U.S. High School Students

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Objectives: Certain risky behaviors [e.g., safety belt non-use (SBNU)] are established in adolescence, and often coexist. Such behaviors have long-term consequences that predispose to injury-related ED visits. To understand how certain risk-prone behaviors coexist, we examined the prevalence and correlates of self-reported SBNU among a sample of US high school students.

Methods: We used the CDC's 2003 Youth Risk Behavior Survey, a population-based high school survey collected by state education departments, to identify SBNU, and the association between risky behaviors and SBNU. We defined SBNU as self-reported safety belt use $<$ 'always.' We included responses from students in grades 9–12 residing in participating states (and the District of Columbia) if respondents' state of residence had a weighted, representative sample of survey data for their jurisdiction, and had an existing safety belt law. Independent factors were selected a priori. Covariates significant to $p < 0.10$ in bivariate analyses were assessed for correlation between behaviors that might impact the regression model using Kendall's tau-b test. The remaining covariates were included in a multivariate logistic regression model to determine correlates of SBNU.

Results: Among 71,646 respondents from 30 of 32 participating states, reported SBNU was 59%. In bivariate analysis, SBNU was associated with male sex, tobacco use, alcohol use, marijuana use, low grades, carrying weapons in school, nonwhite race, and weaker safety belt laws (all $p < 0.001$). Upon correlation assessment, poor grades (OR 2.17, 95% CI = 2.01 to 2.34), alcohol use (OR 2.14, 95% CI = 2.08 to 2.22) and carrying weapons in school (OR 1.59, 95% CI = 1.51 to 1.67) were most strongly associated with reported SBNU in a multivariate logistic regression model.

Conclusions: The SBNU is widely reported by US high school students, and linked to several risky behaviors. A developed understanding of these relationships may