Crash Analysis

In Louisiana, driving under the influence of alcohol remains a top safety issue. Drunk drivers are at least 13 times more likely to cause a fatal crash than sober drivers, according to a new study by [Steven Levitt, Professor of Economics at the University of Chicago and Jack Porter](http://www.nsf.gov/cgi-bin/getpub?pr01106), Professor of Economics at Harvard University.

The analysis of fatal alcohol-related crashes in this section is based on an estimate obtained via a classification model developed at LSU. The model was tested for past years and shows very reliable results with a standard error less than 1%.  The reported BAC results may be either based on a breathalyzer test or on a blood-alcohol test. The crash report does not distinguish between the two types of tests. However, in many cases, the  BAC test results are still pending. For this reason, the classification model is applied to generate missing  BAC results to estimate the percent of alcohol-involved fatalities.   Alcohol-related crashes occurred more frequently on weekends than during the week. The evening hours and early morning hours on weekends had the highest frequency of alcohol-involved crashes. Friday night and Saturday night involved the highest frequency of alcohol-related fatal and injury crashes. While Table A4 depicts the trend in the alcohol-related fatal, injury and PDO crashes, the main findings may be summarized as follows:

455 traffic fatalities were estimated to be alcohol related in 2006.

417 of the 455 fatalities in alcohol-involved crashes (91.6%) had either alcohol themselves or were driving with a person who had alcohol.

63 of the fatalities in alcohol-involved crashes (14.6%) where killed by another driver who used alcohol.

Alcohol was involved more in urban area crashes than in rural-area crashes (47% versus 46%).

Of particular concern is the involvement of drivers under the age of 21. Until 1995, the law did not address the illegal sale of alcohol to persons under age 21, but only the illegal purchase and possession of alcohol by persons under 21 years of age.  In 1995, modifications of the law made it illegal to sell alcohol to persons under the age of 21. This 1995 modification also made it illegal to purchase and possess alcohol for persons less than 21 years of age. Although challenged, courts upheld the law. In 1997, legislation passed making it illegal for persons below 21 years of age to drive with a BAC of 0.02 or above (zero tolerance law). In 2004, a challenge of this 1997 legislation claimed that it capriciously discriminates against the youth (18-20-year-olds). The Louisiana Supreme Court ruled in May 2004 that the zero tolerance law is constitutional, thus upholding the 0.02 BAC law.

There are several ways of presenting alcohol-related crashes by age:

The first method is to compare crash rates (crashes per 100,000 licensed drivers) in an age group. Even though it is illegal for youths under 21 to consume alcohol, the alcohol-related crash rate for 18 to 20-year-old drivers was about twice the average (30 versus 14 per 100,000 drivers) of drivers of all groups in 2006. The same is true for drivers killed in alcohol-related crashes (18 versus 11 per 100,000 drivers).

A second method of understanding how alcohol-related crashes are affected by age is comparing what percentage of the total of alcohol-related involvement each age group has. While only 5.2% of the licensed drivers in 2006 were between 18 and 20 years old, 11% of the drivers in fatal crashes using alcohol were of age 18-20 and 9% of the drivers killed using alcohol were of ages 18-20.

A third method is the percentage of alcohol use of drivers in each age group. This percentage is based on the number of crashes each age group is involved in. For instance, 33% of drivers in the age group 18-20 who were in fatal crashes used alcohol.

Table A6 shows that the percentage of drivers arrested for DWI and not convicted continues to increase and stands now at 66%; i.e. two out of three arrested drivers are not convicted of DWI. The percentage of DWI 1st-4th was only 20% in 2006. The remaining 14% took advantage of 984.

Table A7 show the trend of crash rates (per 100,000 licensed drivers) of alcohol-related crashes involving drivers ages 15-24. The table shows that the alcohol-related crash rates for ages 15-17 declined in 2006. The fatal crash rate was 20 per 100,000 licensed drivers and the injury crash rate was 177. However, the alcohol-related fatal crash rate for 18-20 year-old and 21-24 year-old drivers was up in 2006.