

# [Tram accident and drunken driving submitted](https://assignbuster.com/tram-accident-and-drunken-driving-submitted/)

A Report on Road Accidents - Role of Cell phones and Drunken Driving Submitted to Dr. Naval Bajpai Submitted by Arnab Roy Pousali Chakrabarti Shashank Badre Prateek Singh Section A Quantitative Techniques Indian Institute of Management Raipur ACKNOWLEDGEMENT We would like to sincerely thank Prof. Naval Bajpai, Indian Institute of Management Raipur for his valuable guidance in this project right from the conception till the completion of the same. We would also like to thank our beloved, Prof. B. S. Sahay, Director of Indian Institute of Management Raipur, for rendering his support during the entire project period. We also thank all the anonymous referees for their valuable comments on the report. Last but not the least; we thank our classmates for their encouragement and support. ------------------------------------------------- 1. Introduction India has the second largest road network in the world with over 3 million km of roads. These roads make a vital contribution to the India’s economy. As per the data of National Crime Records Bureau India, in 2010, total number of deaths due to accidents were 3, 84, 649 in India. Road injuries are now among the three leading causes of death for those in the 5-44 age groups in India. The recent data released by surface transport ministry of India shows 22. 4% of accidents and about 20. 2% of road accident injuries were caused by two-wheelers. In the city of Delhi, driving under influence of alcohol took 10, 553 lives in 2011. Car accidents and the heavy vehicle accidents play a major role in seriousness of a road accident. After searching the details it was found that causes for road accidents in India are drunken driving, cell phone use while driving, crossing speed limit, rash driving, jumping signals, avoiding seat belt, overtaking aggressively. Among all these causes cell phone use and drunken driving are the main causes of the road accidents in India. This research work was carried out to study the role of drunken driving and cell phone use in road accidents. Five liker scale questionnaire was designed, it contains fourteen questions spread across five sections and the questions were ranked from one to five in such a way that if they strongly agree with the statement, they will tick five. Four if the statement is certainly agree with the statement, three if the statement is neither true nor false of their situation, two if they certainly disagree with the statement and one if the strongly disagree with the statement. 2. Literature Review 2. 1 References from research papers The research papers that studied the road accidents and role of drunken driving and cell phone use in road accidents were used for reference. T. Sivakumar and Dr. R. Krishnaraj (2012) has studied the road accidents and drunken driving as a cause for the road accidents. They have done a detail study on the effect of alcohol on the body of human being and justified the road accidents due to alcohol consumption. Jay Przybyla and Xuesong Zhou (2008) studied a relationship between cell phone use while driving and deterioration in driving performance leading to an increased risk of collision. Their study was mainly based upon behavioural, experimental, and real-world studies 2. 2 References from Articles published Articles which were published on road accidents were used to study the road accidents and major causes of it. An article by Jayashree Pakhare (2011) stated the effects of alcohol on the nervous system on human being and covers certain facts that reveal ill-effects of driving under the influence of alcohol. An article by Kounteya Sinha and Dipak Kumar Dash (2011) studies the road accidents in India and states certain detail facts such as percentage of two wheelers involved in road accidents, percentage of four wheelers in road accidents. 2. 3 Data from Authorized websites \* Telecom regulatory authority of India website was referred to get the details on the increase in the number of cell subscribers over the year. \* Data from National Crime Records Bureau is used to study the accidental deaths and injuries. 4. STATISTICAL ANALYSIS AND INTERPRETATION Year | Deaths | 2004 | 277263 | 2005 | 294175 | 2006 | 314704 | 2007 | 340794 | 2008 | 342309 | 2009 | 357021 | 2010 | 384649 | Table 1 — number of deaths in India due to Road Accidents as per National Crime Records Bureau - India 4. 1 Casualties in India caused by road accidents 1. The number of casualties in India has been increasing every year 2. In year 2004, total number of casualties recorded due to accidents were 277263 3. In the year 2010, total casualties recorded are 384649 which indicates that there has been considerable rise in deaths since 2004 Figure 1 — number of deaths in India due to Road Accidents Figure 2 — Minitab output (graphical summary) of the number of deaths Road Accidents in India from 2004-2010 Observations: 1. On an average the number of deaths and injuries due to terrorist attacks every year is around 330131. 2. The standard deviation is relatively high as number of deaths are increasing every year. 3. The minimum number of deaths and injuries is 277263 in 2004 and maximum number is 384649 in 2010 4. The data is negatively skewed that is the data is left skewed. 5. The pattern shows that there has been consistency in the data which is why we can infer that the number of deaths is increasing every year consistently. References McCartt, A. O. (2007). Cell Phones and Crash Risk. Insurance Institute For Highway Safety. Dash, K. S. (2011). 30, 000 more killed in road accidents last year. New Delhi: The Times of India. Dr. R. Krishnaraj, T. a. (2012). ROAD TRAFFIC ACCIDENTS (RTAs)-DUE TO DRUNKEN DRIVING IN INDIA. Chennai: International Journal of Research in Management & Technology. Pakhare, J. (2011). Drunk Driving Facts. www. buzzle. com. http://ncrb. gov. in/accdeaths. htm http://www. edgarsnyder. com http://www. caddindia. org/images/report. doc http://www. icra. in/Files/Articles/2009-March-TelecomInfra. pdf http://www. trai. gov. in/WriteReadData/trai/upload/PressReleases/816/Press\_release\_feb%20-11. pdf http://www. trai. gov. in/ShowPDF. aspx? LNK\_PATH= WriteReaddata/StudyPaper/Document/studypaper16dec08. pdf