World Academy of Science, Engineering and Technology
International Journal of Economics and Management Engineering
Vol:8, No:01, 2014

Transportation Accidents Mortality Modeling in Thailand

Authors : W. Sriwattanapongse, S. Prasitwattanaseree, S. Wongtrangan

Abstract : The transportation accidents mortality is a major problem that leads to loss of human lives, and economic. The objective was to identify patterns of statistical modeling for estimating mortality rates due to transportation accidents in Thailand by using data from 2000 to 2009. The data was taken from the death certificate, vital registration database. The number of deaths and mortality rates were computed classifying by gender, age, year and region. There were 114,790 cases of transportation accidents deaths. The highest average age-specific transport accident mortality rate is 3.11 per 100,000 per year in males, Southern region and the lowest average age-specific transport accident mortality rate is 1.79 per 100,000 per year in females, North-East region. Linear, poisson and negative binomial models were chosen for fitting statistical model. Among the models fitted, the best was chosen based on the analysis of deviance and AIC. The negative binomial model was clearly appropriate fitted.

Keywords : transportation accidents, mortality, modeling, analysis of deviance
Conference Title : ICEORS 2014 : International Conference on Econometrics, Operations Research and Statistics
Conference Location : Zurich, Switzerland
Conference Dates : January 14-15, 2014