

The number one cause of death among young people between the ages of 15-29 is motor vehicle accidents. Nearly 44,868 vehicles were involved in fatal crashes in 2013. Roughly 10.6% of all these accidents came from motorcyclist related collisions. In this project, I want to observe the different factors/causes of motorcyclists' deaths, for example, helmet use, time of day, age, and day of the week. With this data, I will figure out which one of these factors causes the most deaths and is there any way to prevent these deaths from happening.

The data comes from the National Highway Traffic Safety Administration (<http://www-fars.nhtsa.dot.gov/>). They collect the data about all the different types of accidents that occurred, i.e. motorcycle collisions, bus collisions, pedestrian collisions, and how they occurred. They also break the data down to the number of motorcycle accidents that occurred, the type of motorcycle that was being driven, and if it was multiple vehicle crash or a single vehicle crash. Not only do they have data on the number of motorcycles involved in a fatal accident, but they also have the number of motorcyclists involved. This would include, whether the rider or the passengers died, whether they were wearing a helmet, and whether they were licensed.

Using this data, I will be able to look at the number of deaths that occur in the weekday versus weekend, the time of day these deaths occur, if they are wearing a helmet, and/or if they had a license. I will be using simple linear regression to conduct my experiment, and will be able to tell what is the main cause of death for motorcyclists. With this data, I expect to see that one of the main factors in motorcycle caused deaths, is riding during the weekend around the early hours of

1AM- 6AM. I also expect to see that there will be more deaths that are due to people not wearing a helmet than people who are wearing a helmet. Finally, with this data, I would like to see if there are any laws or restrictions that can be imposed so that the number of motorcyclists deaths decrease. For example, there could be a law to wear helmets at all times in all states or restrict riders to only drive in the day time hours.