Accidents in Porto Alegre city

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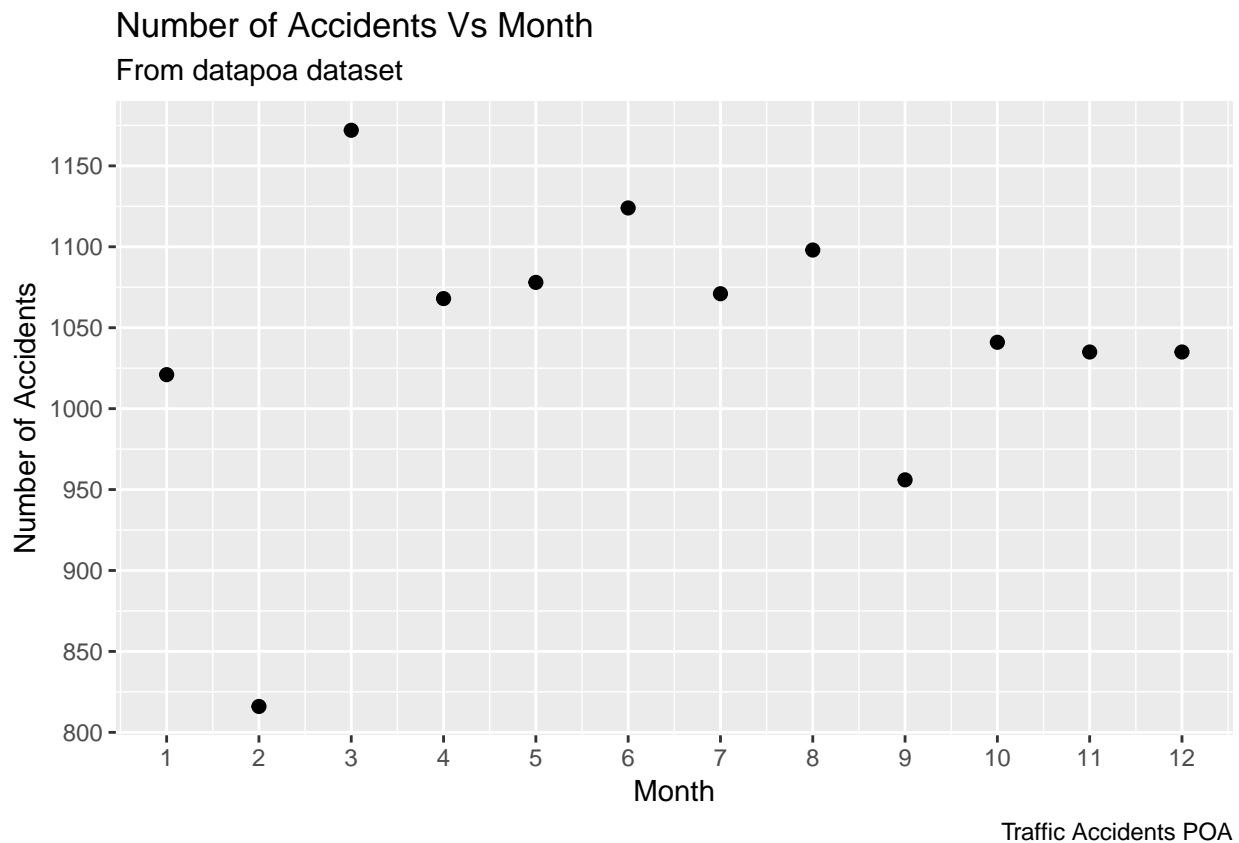
12 de novembro de 2018

Introduction

In this study a data set of the poa accidents (generated by the city public transport and circulation company) that occurred in the year of 2016 is analized.

Which month is the one with more accidents?

For each accident, the dataset provides the month of its occurence, by crossing those informations it is possible to find out which month more accidents occurred. As we can see in the graph below, the month of March has more accidents than the other months of the year.

Number of Accidents Vs Month

From datapoa dataset

Traffic Accidents POA

Is there a specific type of accident that happens more often during the year?

The dataset provides data about the type, the amount and the period of the accidents that occured. By crossing those information we can plot a graph that shows that "Abalroamento" appears to be the most frequent accident in the course of the year.

Number of Accidents Vs Month Vs Type
From datapoa dataset

Traffic Accidents POA

Is there a specific shift of the day with more accidents?

In the dataset, we have access to the shift of the day that each accident occured and knowing that, we can answer the question above. Before ploting the graph, as there are some inconsistencies with some data (values that does not count as "DAY" or "NIGH"), those inconsistencies were removed to generate the graph. According to the generated graph bellow, the shift of the day with more accidents during the year of 2006, is the day-shift.
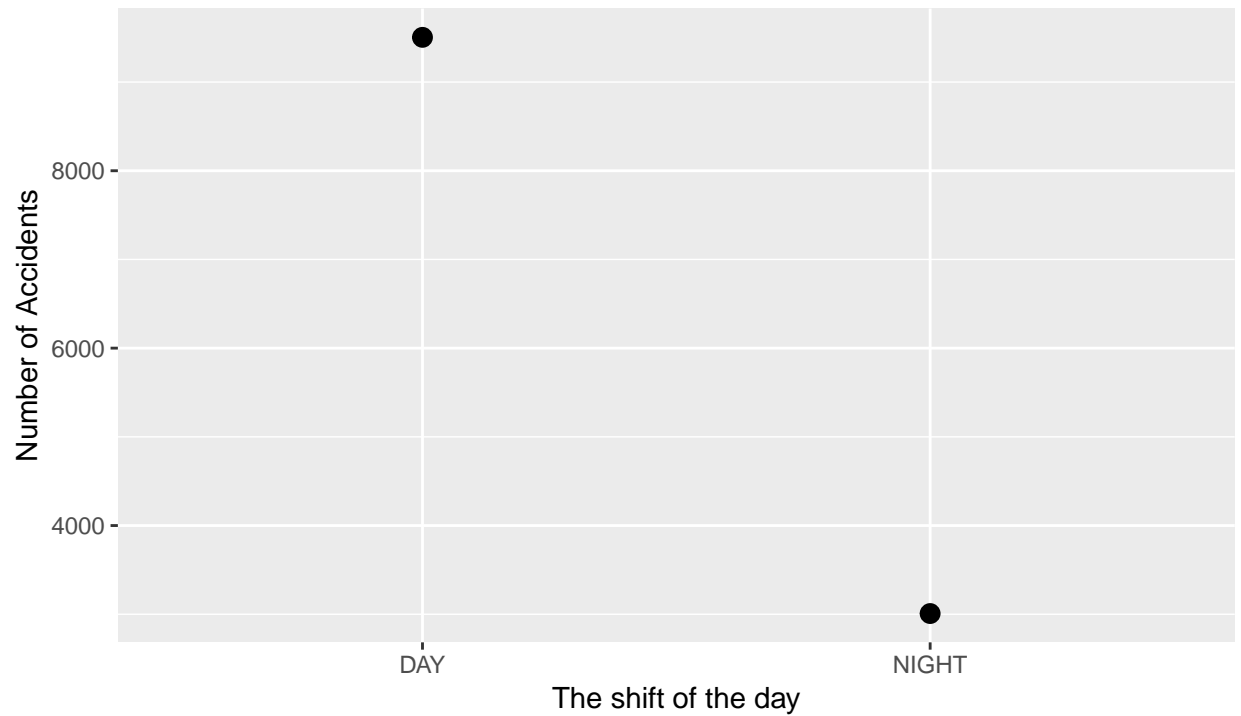
```
##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##     filter, lag

## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

Number of Accidents Vs Day–Shift
From datapoa dataset

Traffic Accidents POA