Presentation of accident data in the PACA region of young people

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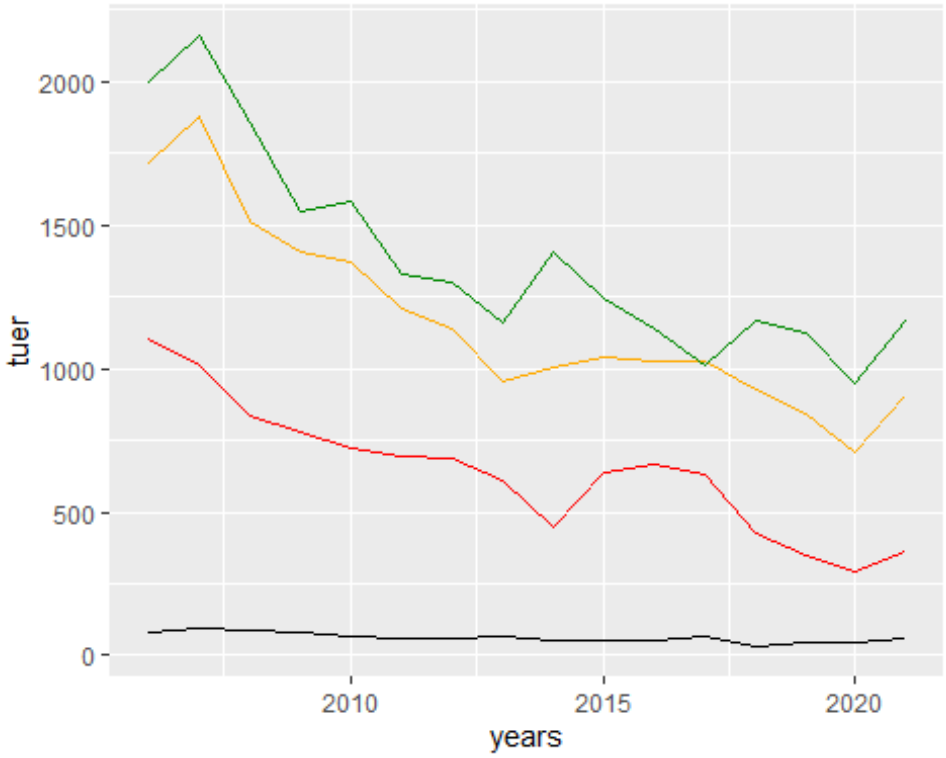
The Provence-Alpes-Côte d'Azur region

This region is located in the very south of France, on the Mediterranean Sea. This locality count 5 098 666 inhabitant (insee). It contained the six following department: The Alpes-de-Haute-Provence (04), the Hautes-Alpes (05), the Alpes-Maritimes (06), the Bouche-du-Rhone (13), the Var (83) and the Vaucluse (84). The largest one in area being Alpes-de-Haute-Provence with 6,944 km^2.

In this document we will see data about accident of young people (18 to 24 years old) in the PACA region over 2006 to 2021. All of the data come from and open data source provided by the french government To understand the best of differente évolution we need to keep in mind the lockdown during the COVID-19.

Evolution of number of accident over from 2006 to 2021

Each color represente a severity of the accidents. We can see that globaly the number of accident decreased by half in this time period. The least decreasing line is the number of death, so the number of people dying is almost the same as of 2006. But we can see that the curve that is decreasing the most is the lighty injured followed closly with the unharmed one. This allows us to that, while the number is almost the same throughout the years, the security of the user of the road have increased.



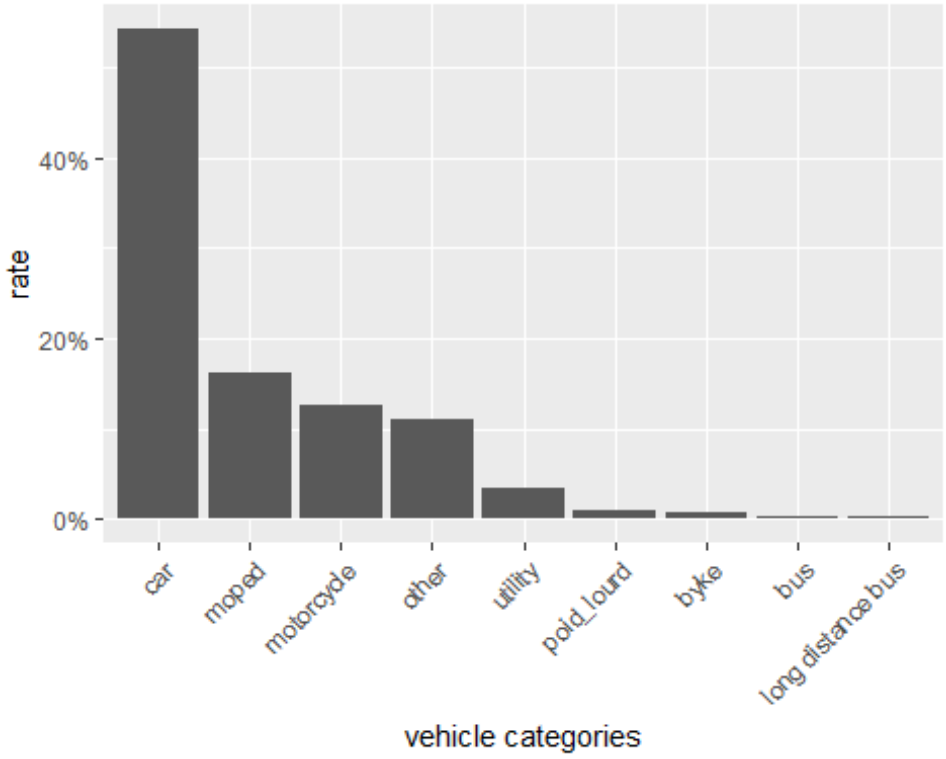
Rate and number of accident by department

This chart show the total number of accident and the participation of rate of each gender. We can read that the 3 departments with the most crash are Bouche-du-Rhone, Alpes-Maritimes and the Var wich is understandable because those are the most populated localities in the PACA region. These 3 region are all on the seaside and see a rapid increase of population during summer break. Another fact that we see is that the rate of a man in a crash is much higher than the rate of a women in an crash. This is intresting because this mean that a young man is more likely to have casualties than young women. This rate doesn't change that much with the department.

```
## # A tibble: 6 × 4
##   departments             Total `rate of men` `rate of women`
##   <chr>                   <dbl>         <dbl>           <dbl>
## 1 Bouches-du-Rhône        29221          68.3            31.7
## 2 Alpes-Maritimes         12027          68.0            32.0
## 3 Var                      6509          69.7            30.3
## 4 Vaucluse                 2515          72.2            27.8
## 5 Alpes-de-Haute-Provence   973          70.3            29.7
## 6 Hautes-Alpes              826          66.7            33.3
```

Accident rates by vehicle category

This chart show us the rate of accident by vehicle category. The vehicle category with the highest rate is the car with wore than half of the accident. The next most crashed vehicle type is the small moped less than half the car amount. It is followed closly by the motorbike. With this chart we can see that young people are more likely to have a car crash than a bike crash. But the motored two-wheeled vehicle are very presente with a combined 30% of accident.



Accident rates by safety device

With this table we see that the most deadliest security device is not using one. The first thing we can conclued is that safety device do work but to an extente. The second safety device is helmet, it is maybe this hight because of the use you have of this device. You probably dont use a helmet in a car or a bus. The high rate of death with helmet is maybe due to the fact that it enforce by law to use a helmet on a motorbike. Also on vehicle that are ridden on, the protection is not great so the gravity of a accident is much more likely to be worst and might cause death. On the other side we can see that airbag and glove have no death.

```
##        type of safety rate of death
## 1    Aucun équipement   0.104615385
## 2               Autre   0.029702970
## 3              Casque   0.024050245
## 4            Ceinture   0.011708665
## 5  Dispositif enfants   0.007407407
## 6 Gilet réfléchissant   0.000000000
## 7              Airbag   0.000000000
## 8               Gants   0.000000000
## 9      Gants + Airbag   0.000000000
```

Total number of accidents per period of the year

This line chart show the number of accident over each day of the year. We can see that the curve is fluctuating wildly. We can see a peak at the july (juillet) mark, during the summer break. Wich is normal as of the region. We can see a much intense dip at the start and the end of the year maybe because people living on the coastline move to the mountain during winter so their is much less people living in this region.