Effect of preventive measures in mortality for road injuries in Brazil

**Introduction**
- Lower rates among high income countries (Europe and North America);
- Latin American countries: 8% (111,757) of global deaths (traffic): Paraguay (24,6/100 thousand), Venezuela (24/100 thousand) and Ecuador (23.4/100 thousand), Brazil (23.2/100 thousand)- GBD
- Increasing trend (2006 a 2012)
- Economic development; Increased fleet of motor vehicles (cars and motorcycles); Tax-free
- The Dry Law (2008) and the greater strictness of this law (2012)

**Objective**
- Analyze the trend of mortality due to road injuries, according to the conditions of the victims, in Brazil, from 2000 to 2016.

**Methods**
- Time series ecological study on the magnitude and trend of mortality due to road injuries in Brazil;
- Data obtained from the Mortality Information System;
- The non-specific underlying causes of death were redistributed to the specific causes of road injuries;
- Mortality rates were standardized by the direct method);
- The joinpoint regression method was used.

**Results**
In Brazil, in 2016, 37,345 deaths were registered for this cause. During the analyzed period, there was a reduction of 1.7% in the mortality rate due to road injuries, from 19.2 to 18.8 per 100,000 inhabitants, the lowest rate since 2000. In 2012, a change in the trend was observed. In the period prior to a greater strictness of the “Dry Law” (Lei Seca), from 2000 to 2012, the trend had been increasing, with average annual change of 1.8% (p <0.05). On the other hand, the second period experienced a reduction of -5.6% (p <0.05). The highest risk of death was among motorcyclists in the clusters of the states with the lowest family income. In age-specific mortality, the elderly (pedestrians and car occupants) and motorcyclists (20 to 59 years old) presented higher risk of death.

**Conclusion**
Despite of the greater strictness of the Dry Law (2012), together with the economic crisis (2014) and the implementation of a monitoring program and action to reduce road injuries (Vida no Trânsito Project), it is necessary to increase efforts in policies aimed at reducing road injuries in Brazil.