

## What about the seatbelt use?

Results of the seatbelt behaviour measurement 2015

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Research report N° 2016-R-04-SEN D/2016/0779/54 Author: Quentin Lequeux Responsible editor: Karin Genoe Editor: Belgian Road Safety Institute – Knowledge Center Road Safety Date of publication: 15/06/2016

Complete report available in Dutch and French:

Lequeux Q. (2016). Hoe staat het met onze gordeldracht? Resultaten van de gedragsmeting gordel 2015. Brussel, België: Belgisch Instituut voor de Verkeersveiligheid - Kenniscentrum Verkeersveiligheid

Lequeux Q. (2016). Quid du respect du port de la ceinture de sécurité? Résultats de la mesure de comportement ceinture 2015. Bruxelles, Belgique: Institut Belge pour la Sécurité Routière - Centre de Connaissance Sécurité Routière

## Summary

Despite the obligation to use the seat belt either as a driver or a front passenger (introduced since 1975) and as a rear passenger (since 1991), it is still not worn by all road users. Yet, wearing the seat belt is crucial as it reduces accident seriousness and the number of road victims.

Although the objectives set by the Federal Commission for Road Safety (CFSR) are still not achieved, results are however encouraging as the seat belt wearing rate observed since 2003 (at that time only 57% of front-seated car occupants were restrained) has been significantly increasing in the following years and reached nearly 80% in 2007. Then, the seat belt wearing rate continued to increase up to 91,7% in 2015, its highest value ever observed. As a comparison, the seat belt wearing rate was 86,4% at the time of the last behavior measurement performed in 2012.

Awareness campaigns and road controls which have been implemented in the last few years encourage drivers and passengers to wear the seat belt more frequently. These measures are essential to enhance road user safety and their spread contribute to increase the proportion of drivers and passengers who fasten the seat belt during their road trips.

Since 2003, the Belgian Road Safety Institute (BRSI) has been conducting behavior studies on seat belt wearing in Belgium. They have been performed each year until 2010 and reiterated in 2012 and in 2015. The objectives of this report is to describe the methodology used to measure the behavior of drivers and passengers in terms of seat belt use in 2015, to present the obtained results and to observe their evolution.

Until 2012, studies conducted by the BRSI concerned the wearing of seat belt by drivers and front-seat passengers. During the study conducted in 2015, the wearing of seat belt by rear-seat passengers was also measured. This new measurement enabled to enlarge the scope of our research as regards the seat belt use and to closely follow the evolution of road users' behaviors observed in front seats of cars. In addition, light commercial vehicles (including van-like vehicles) have also been observed. The observations related to this type of vehicles will be analyzed separately.

Results obtained at the end of the 2015 study show that the national rate of seat belt use is 91,7%. They also show that the seat belt wearing rate strongly depends on the position of occupants inside the vehicle: the percentage of people wearing the seat belt at the rear of the vehicle (85,5%) is obviously much lower than of those wearing it in the front (91,7%). Among the road users sitting in the front of cars, disparities are much less perceptible since 91,5% of the drivers wear the seat belt compared to 92,2% of the passengers (Figure 1).

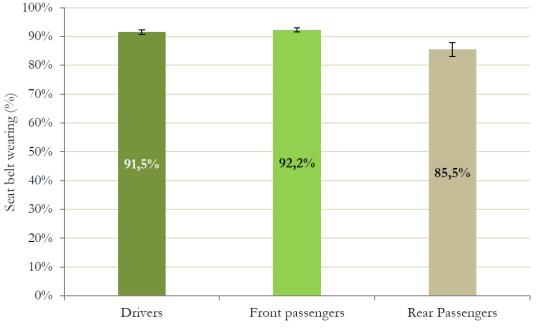
Thus, despite the obligation to use the seat belt, an important percentage of 8,5% of drivers do not wear safety belt. However, a European Union regulation obliges the implementation of seat-belt reminder alert systems in vehicles. This system is compulsory for drivers but remains nevertheless optional for passengers. The development of seat-belt reminder alert systems that would be extended to all the passengers could be a solution for encouraging more passengers - especially rear-seat car passengers - to use the seat belt. This safety system extended to rear passengers has incidentally been implemented by several car manufacturers.

Apart from the position of car occupants, other factors can also be associated with the wearing of the seat belt, namely: the type of vehicle (depending on whether observations are made in private cars or light commercial vehicles), the driver's behavior, the type of car occupant (depending on occupant's gender and whether the occupant is an adult or a child), the location where the observation is made (region) and the maximum authorized speed.

The results of the present study show that the seat belt wearing rate observed in the front seats of light commercial vehicles is only 73,3% whereas it reaches 91,7% in private cars. This difference between these two types of vehicles is visible both in urban areas and on national roads and motorways. Special measures could be implemented in order to promote the use of the seat belt within light commercial vehicles. For example, companies could be encouraged to develop policies in order to incite employees to respect safety rules during their professional business trips.

The use of seat belt also depends on the relation existing between the behavior of drivers and the one of passengers. In this regard, the study indicates that the seat belt wearing rate for passengers is much more important when the driver is restrained by the seat belt (93,3%) than when the driver is not (49,4%). The mutual influence of behaviors among occupants observed within a single vehicle has previously been demonstrated on the basis of results from attitude measurements studies led by the BRSI.

At last, the occupant type in terms of age and gender (men, women or children), the location where the observation has been made (region) and the maximum authorized speed are all factors associated with significant differences of behaviors in terms of seat belt use. In this respect the results of the study show that men use the least often the seat belt (90,4% of men drivers) compared to women drivers (93,5%). At the regional level, Wallonia has the lowest seat belt wearing rate of 90,0% compared to 94,0% in Flanders and 94,7% in Brussels. At the same time, it can be noticed that seat belt use is more often neglected on roads where speed is limited to 30 km/h (88,2%) than on roads with higher speed regimes (>90%).



## Figure 1. Seat belt wearing rates for drivers and passengers in 2015.

Source: BRSI, 2015



Belgian Road Safety Institute Chaussée de Haecht, 1405 1130 Brussels <u>info@ibsr.be</u>

> Tel.: 0032 2 244 15 11 Fax: 0032 2 216 43 42