

Report no. 2020-R-09-SEN

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[Subject]





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Responsible publisher: Karin Genoe

Publisher: Vias institute – Knowledge Centre Road Safety

Date of publication: 22/10/2020 Legal deposit: D/2020/0779/61

Please refer to this document as follows: Nieuwkamp, R. & Boudry, E. (2020). The effectiveness of Driver Improvement courses in Belgium for drunk drivers on preventing recidivism. Brussels, Belgium: Vias institute

- Knowledge Centre Road Safety.

The complete report is available in Dutch and French: *Wat werkt voor bestuurders onder invloed van alcohol? Een studie naar de effectiviteit van educatieve maatregelen.* And: *quelles sont les mesures efficaces pour les conducteurs sous l'influence de l'alcool ? Une étude sur l'efficacité des mesures éducatives.* 

This research was made possible by the financial support of the Federal Public Service Mobility and Transport.

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### **Summary**

#### Introduction

Driving under the influence of alcohol is a major threat to road safety worldwide (Meesmann, Vanhoe, & Opdenakker, 2017; SWOV, 2018). An important question is how we can prevent that drivers who have committed such offence will reoffend in the future. Regarding sanctions for such offence, one can distinguish between traditional and alternative sanctions. A traditional punishment usually consists of paying a fine and revoking the driver's licence. An alternative sanction aims at permanently changing the behaviour of drivers, through intensive training. Both methods of punishment try to avoid future recidivism.

The results of international research show that an alternative sanction results in less recidivism compared to a traditional sanction, although there are also studies with inconsistent results or with results in the opposite direction. A recent meta-analysis (Slootmans, Martensen, Kluppels, & Meesmann, 2017) shows that following a driver improvement course reduces the risk of recidivism. In Belgium, Vias Institute – the former Belgian Road Safety Institute – has a longstanding tradition of providing these types of trainings. In 2003, an effectivity study was conducted for the first time in which the drivers who followed a driver improvement course were compared with the drivers who were given a traditional sanction (Van Laar, Kluppels, Wiseur, & Goossens, 2003). Although the results did not differ significantly from each other, there is a tendency for the drivers who followed the training to have less recidivism than the drivers who were given a traditional sanction. This trend is also reflected in more recent studies (Waeyaert, 2017).

#### **Method and results**

In the period between 2003 until 2019, the number of drivers who followed a driver improvement course multiplied by five, and the content of the training courses is also further developed. For this reason, it is opportune to determine the effectivity of these training courses in 2019, where recidivism is the most important outcome measure. This study includes 606 drivers who were given either a traditional or an alternative punishment between 2010 and 2014. For all drivers, it was studied whether they have reoffended until December 2017. The results show that the drivers who followed the driver improvement course have 41% less recidivism at the end of the follow-up period compared to the drivers who were given a traditional punishment. In addition, the time until the next offence is longer for the drivers who have followed the training. The chance on recidivism is 2.63 lower for drivers who followed the driver improvement course compared to drivers who have been traditional punished, based on the results of a Cox regression analysis. Next, the effectivity of the driver improvement course is more pronounced for female drivers and drivers without a criminal record. However, it should be noted that if the drivers who have followed the Driver Improvement training reoffend, their blood alcohol level is higher than the blood alcohol level of the drivers who have been given a traditional punishment.

#### **Conclusion**

The results of this study are in line with the findings in international research. In several international studies, it is recommended to separate in a Driver Improvement training the first offenders from the recidivists. We found support for this recommendation in the present study.

One of the limitations of this study is that it does not have an experimental design. This implies that existing groups of drivers were included depending on which punishment was imposed. The police judge determines in every case whether or not it is opportune to let the driver follow a Driver Improvement training. It is therefore possible that offenders with a certain profile are more referred to the training (i.e., a so-called selection bias) and that, as a result, the course is already more successful in advance. To counterbalance for this potential selection bias, all drivers in the control group (i.e., those who received a traditional punishment) were matched with the drivers who followed the training on the most important aspects. This study also attempted to identify profiles of drivers to determine what sanction should be imposed to reduce reoffending to an absolute minimum. Unfortunately, we must conclude that we have not been able to identify such profiles on the base of the available information. However, we can conclude that the benefits of the driver improvement course are larger for female drivers compared to male drivers that followed the course. This is also the case for drivers without criminal record. Perhaps the development of an instrument (e.g., risk assessment tool) could help in better assessing which type of penalty is most effective for which type of driver. Until then, it is advisable to continue to refer drivers to the Driver Improvement training, especially for first offenders and women.

