

Sustainability of the effects of the demerit points system on seat belt use: A region-wide before-and-after observational study in Italy

Accident Analysis and Prevention, in press.

Zambon F, Fedeli U, Milan G, Brocco S, Marchesan M, Cinquetti S, Spolaore P

To assess the short and long term effects of the demerit points system on seat belt use, we set a region-wide cross-sectional observational study 3 months before, and 3 and 15 months after the introduction of the scheme (July 2003) in the Veneto Region, Italy. We analysed differences in seat belt use by year of observation, gender and position in the vehicle, and obtained adjusted prevalence ratio (APR) through Poisson regression.

A total of 29,303 drivers, 28,778 front and 12,186 rear passengers were observed. Prevalence levels of 54% for drivers and 53% for front passengers in 2003 switched to 83 and 76%, respectively, 3 months after the new legislation, with further slight increases 15 months thereafter. Seventy-four percent rear passengers were still not compliant with the legislation in 2005.

The probability of being belted was 25% lower in males than females (APR = 0.75, 95% CI 0.73–0.77) at the beginning of the study period. However, the effect of the new legislation was 19% greater among males (APR = 1.19, 95% CI 1.16–1.23).

A substantial increase in seat belt use was reached and sustained with the demerit points system. Specific efforts should target rear passengers whose seat belt use still remains worryingly low.

FULL TEXT PER GLI UTENTI REGISTRATI ALLA RIVISTA

[doi:10.1016/j.aap.2007.06.001](https://doi.org/10.1016/j.aap.2007.06.001)