

# RISK OF INJURIOUS ROAD TRAFFIC CRASH AFTER PRESCRIPTION OF ANTIDEPRESSANTS

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**Background** Antidepressants are commonly used worldwide. Experimental studies have suggested that antidepressants may impair driving abilities.

**Aims/Objectives/Purpose** The study aims to estimate the risk of road traffic crash associated with prescription of antidepressants.

**Methods** Data from three French national databases were extracted and matched: the national health care insurance database, police reports, and the national police database of injurious crashes. A case-control analysis comparing 34 896 responsible versus 37 789 non-responsible drivers was conducted. Case-crossover analysis was performed to investigate the acute effect of medicine exposure.

**Results/Outcomes** 72 685 drivers identified by their national health-care number, involved in an injurious crash in France over the July 2005 to May 2008 period, were included. 2936 drivers (4.0%) were exposed to at least one antidepressant on the day of the crash. The results showed a significant association between the risk of being responsible for a crash and prescription of antidepressants (OR=1.34 (1.22 to 1.47)). The case-crossover analysis showed no association with treatment prescription but the risk of road traffic crash increased after an initiation of an antidepressant treatment (OR=1.49 (1.24 to 1.79)) and after a change in antidepressant treatment (OR=1.32 (1.09 to 1.60)).

**Significance/Contribution to the Field** Patients and prescribers should be warned about the risk of crash during periods of antidepressant medication and particularly high vulnerability periods such as those when a treatment is initiated or modified.