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**USE OF ANTIDEPRESSANTS, ANXIOLYTICS, HYPNOTICS/
SEDATIVES AND ANTIPSYCHOTICS AND ROAD TRAFFIC
CRASHES WITH INJURIES IN ELDERLY DRIVERS. A
SWEDISH POPULATION-BASED REGISTER STUDY**

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Background Road traffic crashes (RTC) are increasing among elderly drivers, often exposed to medical drugs. Data suggests that some psychotropic medications can impair driving skills by affecting motor, sensory and cognitive faculties through various mechanisms resulting in higher crash and injury rates.

Aim To determine the association between the use of antidepressants, anxiolytics, hypnotics/sedatives and antipsychotics and the occurrence of RTC in elderly drivers.

Methods We designed a matched case-control study based on record linkage from five population registers in Sweden. Cases were drivers aged 50–80 year, unexposed to alcohol, which crashed from 1 July 2005 to 31 December 2009. To each case four controls with driving license were randomly selected and matched by sex, age, area of residence and index date of the case. A total of 30 809 cases and 123 236 controls were included. Exposure was defined as dispensed medication and assessed in the 1–8 days prior to the crash. Conditional logistic regression was used to estimate OR (95% CI) adjusting for civil status, occupation and number of medications.

Results RTC involving >1 vehicle accounted for 85.6%, 71.3% occurred during daylight, 78.8% under clear weather, 54.1% in densely-built areas and 81.4% resulted in mild injuries. Adjusted ORs for antidepressants, anxiolytics, hypnotics/sedatives and antipsychotics were 1.95 (1.63 to 2.33), 1.80 (1.52 to 2.13), 1.75 (1.53 to 1.99) and 1.64 (1.15 to 2.30), respectively. Older drivers (66–80 year) and women consistently had lower odds.

Significance Older drivers are at increased risk of RTC after recently receiving psychoactive medications, mainly antidepressants and anxiolytics. Advising patients to desist from driving when taking these psychotropic medications is recommended.