

# EFFECT OF THE OCCURRENCE OF A WORK ACCIDENT ON THE RISK OF BENZODIAZEPINES OVERUSE

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## Abstract

Benzodiazepines are a class of drugs mainly used for their anxiolytic and hypnotic properties, which can lead to dependence. A work accident (WA) could constitute a health shock likely to induce benzodiazepine consumption, particularly because they can alter mental health and therefore indirectly affect the use of psychotropic drugs.

Our objective is to estimate the extent to which a WA could lead to benzodiazepine use or even overuse (defined with reference to medical recommendations). We use a two-step selection model (Heckman method), based on data from the French National Health Data System (*Système National des Données de Santé*, SNDS). Our study sample includes all general plan members who experienced a single WA in 2016 (and not since 2007) (more than 350,000 people) and more than 1.1 million non-victims, randomly drawn from the population of members who did not experience a WA from 2007 to 2017.

We show that the occurrence of WA leads to an increase in benzodiazepine use (+5 pp in the probability of having at least one benzodiazepine delivery in the year following WA), but has a disciplining effect on the risk of overuse (-3 pp in the probability of overuse in the following year). We interpret this effect as the influence of prescriber. The probability of overusing increases with the severity of the accident. The impact of the occurrence of WA is greater for women than for men (for both use and overuse).