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Association between reported work in cold environments and stroke occurrence in the CONSTANCES cohort

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ABSTRACT

INTRODUCTION - Cold environments are a potential risk factor for stroke. The aim of this study was to investigate the association between performing work tasks in cold environments and the occurrence of a first stroke event. **METHODS** - From the French population-based cohort CONSTANCES, we collected data from baseline questionnaires along with medical interviews on cardiovascular risk factors and reported exposure to cold temperatures (<10°C) at work. Exposures were categorized as rare (<2 h/day), often (≥2 and <4 h/day), and almost always (≥4 h/day). Incidence of stroke was retrieved from the French National Health database. Bivariate and multivariable logistic regression models were used to assess the association between working in cold environments and the incidence of stroke. Stratified analysis on stroke types were also conducted. **RESULTS** - There were 160 782 participants and 224 strokes (168 ischemic, 76 hemorrhagic) included in our study. No significant increase of stroke was found for working in cold environments; the adjusted odds ratio (OR) for often or almost always exposed was 1.14 (95% CI, 0.46–2.82). **CONCLUSIONS** - This study did not reveal a significant excess risk of stroke for occupational exposures to low temperatures. Further studies are needed to better assess the effect of preventive measures and very low temperature on the occurrence of cardiovascular diseases.

KEYWORDS: -

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