

Conclusions Our “shock JEM” classifies occupational titles according to risk of electric accidents as a proxy for electric shock occurrence. Occupations with high potential for electric shock exposure include building frame and finishers, metal moulders and welders, electrical and electronic equipment mechanics and fitters, product machine operators, assemblers and mining and construction labourers.

85 DEVELOPMENT OF A SHOCK JOB EXPOSURE MATRIX BASED ON REPORTED ELECTRIC ACCIDENTS IN EUROPE

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Objectives Electric shocks has been raised as a potential risk factor for neurological disease and in particular for amyotrophic lateral sclerosis (ALS). While actual exposure to electric shocks cannot be measured, electric accidents which are documented in national accident statistics could serve as an exposure proxy. We assessed risk of electric accidents, using occupational accident registries across Europe to develop a “shock-JEM” for application in community-based studies.

Methods Accident data were obtained at 4-digit ISCO88 job codes from five European countries. We retrieved number of workers per ISCO88 job category per country from EUROSTAT at 3-digit level. We calculated number of accidents and corresponding 95% CIs per 10 000 workers per year and country for each 3-digit job code. We pooled accident rates across countries with a random effects model using the METAN command in STATA.

Results For 108 3-digit ISCO88 job codes, we could express the pooled accident rate per 10 000 workers and year. Pooled accident rates varied between zero for to a maximum of 11.6 among electrical and electronic equipment mechanics and fitters.