

Studio di coorte di mortalità degli addetti alla concia del cuoio e delle pelli nel territorio dell'azienda USL 11 – Zona Valdarno Inferiore

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KEY WORDS

Leather tanners; mortality study; Italy

SUMMARY

«Cohort study of mortality among leather tanners in the Lower Valdarno area (Tuscany)». Background: *Epidemiological studies of tanners have shown increased risk for a number of cancer sites, namely: lung, bladder, kidney and urinary organs as well as stomach, intestine, pancreas, nose and nasal cavities, together with leukemias and soft tissue sarcomas.* Objective: *To study cause specific mortality of leather tanners in Tuscany (Valdarno Inferiore area).* Methods: *The cohort included 4874 workers (4150 males and 724 females) employed in 92 tanneries operating in 1996 (Valdarno Inferiore Tanneries Census) which were also operating on 31-12-1970. Ascertainment of vital status was completed for all individuals on 31-12-1998 (end of follow-up), and the cause of death was known for all deceased subjects. Demographic and work history data were obtained from factory payrolls. Regional mortality rates were used for comparison to calculate SMR (Standardised Mortality Ratio) and 90% Confidence Intervals (CI). In addition to the overall cohort analysis, for men only separate analyses were completed for finishers, chrome tanners and vegetable tanners.* Results: *The study showed an increased mortality from lung cancer among finishers, Standardised Mortality Ratio (SMR) 145, 19 observed (obs) (90% Confidence Intervals, 90% CI 95-212), from bladder cancer in the overall cohort (SMR 134, 9 obs, 90% CI 70-233) and among finishers (SMR 125, 2 obs, 90% CI 22-393) and from pancreatic cancer among finishers (SMR 120, 2 obs, 90% CI 21-379). Mortality from lymphoemopoietic cancer is above expected, and the increase is mainly due to myeloid leukaemia, both in males (SMR 208, 5 obs, 90% CI 82-437) and females (SMR 599, 2 obs, 90% CI 106-1887). No deaths from soft tissue sarcoma were observed. A new finding of the study was the increased mortality from cancer of the endocrine glands (SMR 566, 4 obs, 90% CI 194-1297), psychiatric disorders (SMR 195, 6 obs, 90% CI*

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85-385) and blood diseases (SMR 329, 4 obs, IC 90% 112-752). **Conclusions:** *The observations of increased lung cancer mortality among finishers, of bladder cancer in the overall cohort and among finishers, as well as an increase in pancreatic cancer among the latter, confirm previous epidemiological findings among tanners. The increase in myeloid leukemia mortality for both males and females, and the absence of deaths from cancer of the connective tissue, which includes soft tissue sarcomas, are worthy of note. The results should be valued with caution, given the small number of cases and the novelty of some observations.*