

Mortalità negli addetti di uno zuccherificio nell'aretino

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KEY WORDS

Sugar refinery workers; asbestos occupational exposure; mortality study

SUMMARY

«**Mortality in a cohort of sugar refinery workers in Arezzo Province, Italy**». **Background and Objectives:** *The aim of this study was to investigate mortality of a cohort of 1,767 male workers employed in a sugar refinery plant located in the Province of Arezzo, Italy, where asbestos had been used from the 1960's for the insulation of thermo-hydraulic systems and for furnaces. In 1987-88 workers removed the asbestos-cement insulation from the plant.*

Methods: *The cohort was composed by male workers who were employed in the plant between 1 March 1962 and 1 February 1996, and had worked for at least 2 months. Follow-up started on 1 March 1962, and ended on 31 May, 2003. The population mortality for Tuscany Region was used as the reference. The relative risk was estimated by Standardized Mortality Ratio (SMR) and the confidence intervals were calculated at a 95% level (95%CI).*

Results: *The majority of workers were employed during the summer only. Significant decreases in mortality were observed for overall mortality (SMR=78; 95%CI=69-88), all cancers (SMR=80; 95% CI=65-97), cardiovascular diseases (SMR=64; 95%CI=50-81), lung cancer (SMR=66; 95%CI=43-98), and gastrointestinal diseases (SMR=53; 95%CI=26-98). Non-significant increases were observed for kidney cancer (SMR=229; 95%CI=92-472), and diseases of the nervous system (SMR=155; 95%CI=71-294). Kidney cancer mortality for workers employed for ≥ 5 years was significantly higher (SMR=508; 95%CI=105-1485). **Conclusions:** *Mortality for asbestos-related diseases did not show any increase. The higher kidney cancer mortality for workers employed for ≥ 5 years could be due to exposures to various carcinogens, that occurred not only in the sugar refinery plant, given that the workers were seasonal and did other jobs during the rest of the year. Asbestos-related deaths could occur in the future among some workers who in 1987-88 were employed on the removal of asbestos-cement insulation from the plant.**