

MORTALITY RATES FOR ALL CAUSES, ALL TUMORS, AND LUNG CANCER IN THE FORMER INDUSTRIAL AREA OF BAGNOLI AND FUORIGROTTA, NAPLES, FROM 2001 TO 2007: PRELIMINARY DATA

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Mortality data represent a useful marker for population health assessment. Besides, diseases of the respiratory system are particularly relevant in evaluating the long term effects on health among people exposed to industrial pollutants, either occupationally or environmentally. This is precisely the situation of residents in Bagnoli and Fuorigrotta districts, two areas of Naples located in contiguity with the former industrial site of Bagnoli-Coroglio. The aim of the present work was to compare mortality rates for all causes, all cancers, and lung cancers, as observed in people living in Bagnoli and Fuorigrotta with those of the entire population of Naples for the years 2001 to 2007. Mortality data were extrapolated from the mortality register of ASL Napoli 1 centro, Servizio di Epidemiologia e Prevenzione. The following endpoints were taken into account for each of the studied diseases: total number of cases, crude and standardized mortality rates divided by gender, with confidence limits at 95%. Data were not truncated by age because of the low number of cases recorded. Standardization was carried out based on data recorded for the national population (2001 census). Standardized mortality rates (SMR) for the overall period, in males and females, for all causes, all cancers and lung cancers were lower in Bagnoli and Fuorigrotta than in Naples. Throughout the entire period, rates for all causes were constant, in males and females, in Naples and Fuorigrotta and constant or slightly decreasing in Bagnoli. Standardized rates for all cancers in males are constant in the whole Naples municipality, slightly decreasing in Fuorigrotta, and highly decreasing in Bagnoli, while they were constant in females in all three cases. Lung cancer rates in males were constant in Naples and decreasing in Fuorigrotta and, particularly since 2003, in Bagnoli. In females lung cancer rates seem to be slightly increasing in Naples, steady in Fuorigrotta and very variable in Bagnoli, with spikes in 2002, 2004, and 2006, thus showing an opposite trend according to gender in this areas. To improve the epidemiological significance of these results it will be helpful to calculate the SMR for the same data after truncating by age, and to compare them with those obtained from other districts located in close contiguity with other, current or past, industrial areas of Naples (e.g. Barra-Ponticelli-San Giovanni eastern suburbs).

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