Mortality among triazine herbicide manufacturing workers.

Atrazine produces mammary gland cancer in one strain of rats and has been classified as an endocrine modulator. Epidemiologic studies have reported associations between agricultural use of atrazine and several forms of cancer. This study evaluated mortality patterns among workers at a plant that made atrazine and other triazine herbicides. The study covered the time period 1970-1997 and included 2213 people employed for at least 6 mo in operations related to the manufacture or formulation of atrazine and other triazine herbicides at a plant in Louisiana (LA). Vital status was determined for all but six subjects. Standardized mortality ratios (SMRs) with 95% confidence intervals (CIs) compared employees' mortality rates with those of the LA industrial corridor general population. Subjects had a total of 32,473 person-years of observation and a median of 15.8 yr since hire. There were 84 observed/118 expected deaths from all causes combined (SMR = 72, CI = 57-89) and 22/21 total cancer deaths (SMR = 106, CI = 66-160). Subjects had 4/1.1 deaths from non-Hodgkin's lymphoma (SMR = 372, CI = 101-952); this increase was not concentrated in the subgroup with long duration of employment and many years since hire. There were 6/4.8 (SMR = 124, CI = 46-271) digestive cancer and 7/6.3 (SMR = 112, CI = 45-230) lung cancer deaths. Data on other forms of cancer were sparse. This study was limited by its small size, by the relatively young age and short follow-up of its subjects, and by the lack of exposure data. It did not provide evidence that employment in triazine herbicide manufacturing and formulating operations was associated causally with overall or cause-specific