

Zahm, SH. Mortality study of pesticide applicators and other employees of a lawn care service company. J. Occup. Env. Med. 39(11) 1055–1067, 1997.

ABSTRACT:

In response to reports linking non-Hodgkin's lymphoma (NHL) and the herbicide 2,4-dichlorophenoxyacetic acid, a retrospective cohort mortality study of 32,600 employees of a lawn care company was conducted. The cohort was generally young with short-duration employment and follow-up. In comparison to the US population, the cohort had significantly decreased mortality from all causes of death combined (307 deaths), arteriosclerotic heart disease, and accidents. There were 45 cancer deaths (59.6 expected, standardized mortality ratio (SMR) = 0.76, 95% confidence interval (CI) = 0.55, 1.01). Bladder cancer mortality was significantly increased, but two of the three observed deaths had no direct occupational contact with pesticides. There were four deaths due to NHL (SMR = 1.14, CI = 0.31, 2.91); three were male lawn applicators (SMR = 1.63, CI = 0.33, 4.77), with two of the applicators employed for three or more years (SMR = 7.11, CI = 1.78, 28.42). No other cause of death was significantly elevated among lawn applicators as a group or among those employed for three or more years. Although based on very small numbers and perhaps due to chance, the NHL excess is consistent with several earlier studies.