

ABSTRACT

Cancer Mortality in U.S. Counties with Plastics
and Related Industries

IMD

Thomas J. Mason, Ph.D.

Utilizing the Census of Manufacturers, 1963, in individual counties of the U.S. with establishments primarily engaged in manufacturing plastics materials and synthetic resins (SIC 2821), synthetic rubbers (SIC 2822), and cellulosic (SIC 2823) and synthetic (SIC 2824) organic fibers were selected. Site specific cancer mortality rates were calculated for the upper 25% of these counties when ranked on the proportion of the total county population employed in these industries.

Cancer mortality was found significantly deficient for many anatomic sites for the aggregate when compared to the total United States. However, there were significant excesses detected in white males for the subcategories. For plastics the excesses were in lip, testis, skin cancer other than melanoma, eye, and other endocrine glands. For synthetic rubbers the excesses were in nasal sinuses, lung, prostate, bladder, melanoma, and other skin cancer.

For synthetic fibers the excess was in multiple myeloma. The relative contributions of industry, urbanization, and other possibly confounding variables are discussed.

22955001

BFG23343